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the United States*

*Refugee Migration to
California*

*Earnings in Radio
Manufacturing*



U. S. Department of Labor

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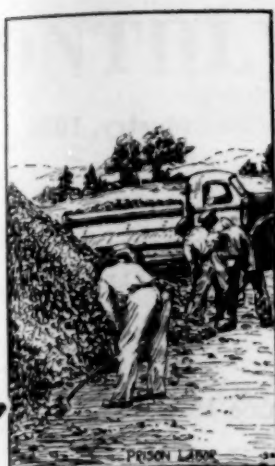
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HUGH S. HANNA, *Editor*

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Oklahoma sharecropper stranded on way to California.

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MONTHLY LABOR REVIEW

FOR AUGUST 1938

CONSUMERS' COOPERATION IN THE UNITED STATES 1920 TO 1936

By FLORENCE E. PARKER, *of the Bureau of Labor Statistics.*

DURING the past few years there has been a marked increase in interest in the United States on the subject of consumers' cooperatives, especially since President Roosevelt in 1936 appointed a commission to study the working of the cooperative movement in various European countries. At the time that that commission was carrying on its foreign survey, the Bureau of Labor Statistics was beginning a survey of the cooperative movement in the United States. This survey followed the same general lines as the earlier studies on the same subject made by the Bureau at various intervals, but was considerably broader in scope, and, while lacking complete coverage, was sufficiently comprehensive to give a fairly accurate picture of the extent and character of all phases of consumers' cooperation in this country.

As a result of this survey, dealing for the most part with conditions as they were in 1936, it was found that the retail distribution and service associations, which constitute the heart of the movement, numbered about 4,100 with over 830,000 members and were doing a business of some \$188,000,000 per year. Because the cooperative movement in this country is largely restricted to certain geographical areas, however, there is undoubtedly much misunderstanding as to what consumers' cooperation is and what it seeks to accomplish.

Any activity in which two or more people join can in a broad sense be called a cooperative enterprise. However, the term "cooperative movement" has come to apply to joint effort under certain well-defined principles. It all began in 1844—nearly 100 years ago—as a sort of protest movement. In that year 28 poverty-stricken flannel weavers in Rochdale, England, decided to take action against the evils from which they suffered: namely, those resulting from unemployment, underemployment, exorbitant prices, and adulteration of goods. Their first step in this ambitious undertaking was a very modest one. They formed the Rochdale Society of Equitable Pioneers, each member subscribing 1 pound sterling to be paid in at the rate of twopence per week. These small sums they invested in small quantities of flour, sugar, butter, and oatmeal, and with these

commodities as their stock in trade they opened a store. As they had to earn their living by labor in the textile mills during the day, the store was open only a few hours on Monday and Saturday evenings.

The organization was successful from the first and in a few years other societies sprang up in imitation, in England and then on the Continent. Organizations patterned after the original are now found practically all over the world. Thus the Rochdale association can be said to be the parent of all the consumers' cooperatives now in existence. It may also be noted that the first cooperative organization is still in successful operation and the original tiny shop in Toad Lane, Rochdale, has been restored and is a mecca for all cooperative travelers.

All truly cooperative associations follow the principles adopted by the Pioneers: Membership is open to anyone who can make use of the association's services. The members themselves provide the capital necessary, but no one has more than one vote regardless of the size of his investment. The members decide what type of business they shall carry on and they control all the policies. Whatever activity they undertake is carried on in their interest as consumers, to supply themselves with goods and services. The characteristic which above all distinguishes the consumers' cooperative business from other business is that the net amount saved through the operation of the business (i. e., what would in private operation be termed the "net profit") is returned to the members, not in proportion to the amount of capital stock they hold, but in proportion to their patronage of the business. Thus, in a store society the member who has spent \$500 at the store in the course of the year receives five times as much as the member whose purchases totaled only \$100.

The consumers' cooperative movement, wherever found, is still grounded upon these principles. The immediate objective is economic—to make the pennies go farther, to eliminate the extra cost entailed by extravagant advertising and by high-pressure salesmanship, to handle only commodities of known good quality, and to fill an increasing number of human wants on a nonprofit basis. Like the original Pioneers' society, the present-day movement also has a far-reaching social philosophy. Its final aim is to supply every need of life, social and economic, without profit and by united effort.

Although the cooperative movement long ago reached the category of "big business" abroad, it remains, as it started, a distinctly working-class movement, although other groups are evincing increasing interest and participation.

So successful has this method of doing business proved that in Great Britain it is estimated nearly half of the whole population is served through the consumers' cooperatives. The Scandinavian countries are other examples of successful operation.

Development in the United States

In this country the first known instance of consumers' cooperation occurred in 1845—only 1 year after its beginning in England—when a tailor in Boston induced the members of his labor union to undertake joint buying of their household supplies and distribute them at the weekly meetings of the union. Another labor organization, the Knights of Labor, actively fostered cooperatives as part of its economic program during the early 1880's. Of the movement that has persisted to the present time, however, the farmers may be said to be the earliest proponents. Some of the Grange stores formed by the Patrons of Husbandry shortly after the Civil War still survive.

Since those early years consumers' cooperation in this country has developed in a series of up-and-down movements corresponding roughly (but in reverse order) with prosperity and depression.

The movement has not yet attained the development in the United States that it has achieved abroad, but it is growing steadily, though slowly, in a number of directions. Not only is there an expanding retail movement, but cooperative wholesaling is now firmly established, and here and there productive activities are being undertaken. Local study groups, city-wide or county-wide councils of local associations, and regional leagues are doing various kinds of recreational and educational work—acting as channels for the exchange of ideas and experience, issuing cooperative literature, furnishing speakers, sponsoring social events, running summer camps for children, youths, and adults, holding classes, and furthering in all possible ways the spread of the cooperative philosophy. All of the educational work is headed up in a national league which serves the movement on a Nation-wide scale.

The movement is also developing its own machinery to supply such centralized service as auditing, advice on merchandising methods, store planning, etc., and the technical training of both managers and clerks. Greater emphasis is being laid upon quality of goods and purchase by specifications, making use not only of established consumer services but to some extent of their own laboratory tests.

Forms of Cooperative Effort

Probably the best-known form of consumers' cooperation in this country is the cooperative store handling groceries or general merchandise. As a matter of fact the store associations do form the largest group and account for the largest proportion of total cooperative business. There are, however, many other lines of activity in which cooperation has made at least a start, and there is probably greater diversification in cooperative effort today than at any time in the history of the movement in the United States.

In various parts of this country cooperatives are supplying themselves with one or more of nearly all kinds of service. Thus, through cooperative channels they obtain groceries, bakery goods, meats, shoes, clothing, furniture, hardware, paints (made in some cases by their own plant), all kinds of farm supplies, radios, refrigerators, electricity and electrical appliances, gasoline, motor oil, tires, and other automobile accessories. They can, in some sections, buy ice cream made in their own plant, bread and pastries from their own bakery, milk pasteurized in their own creamery, coffee roasted in their own roasting plant, and sausage and smoked meats from their own factory.

Cooperators in many places insure themselves against sickness, death, fire, theft, hail, and accident, and insure their automobiles against accidental collision through cooperative or mutual associations. When they fall into debt, they borrow from the credit union.

Medical service is an activity the possibilities of which are being explored with more and more attention. In such associations the physicians' services are engaged on a yearly basis and preventive measures are stressed. If the patient needs hospitalization, he can, in one place, go to the cooperative hospital. At death, cooperators in certain Middle Western States can be laid to rest by the cooperative burial association.

One group of farmers in the West operates its own coal mine from which the fuel needs of the members are supplied. An association in the East provides bus service for the members' children to and from school. Another runs a beauty parlor, and two associations (both in Wisconsin) each have a beer tavern as one department of the association's activities. As an instance of the feasibility of application of the cooperative principle to even the smallest processes of every-day life may be cited the six families which combined in the purchase of a lawn mower and the hiring of a part-time worker to cut their lawns; another association for the same purpose is known to have been started in 1938.

Other services cooperatively supplied include laundry service, printing, and recreational facilities.

This is not to say that all or even a majority of these services are commonly offered throughout the United States. But one or more associations are rendering some of these services and in some districts nearly a full complement has been attained. Such a district is represented in St. Louis County, Minn., where a special study made for the Bureau revealed a high degree of cooperative infiltration. In that sparsely settled area of some 7,000 square miles, with a population in 1930 of 204,596, the consumers' cooperatives alone had a combined membership of about 13,500; this number did not include the members of the many cooperative associations marketing or processing farm

products, neither did it include the families of members of the consumers' societies.

In that area cooperative telephone service, credit, lodgings, recreational facilities, electric power, insurance, garage service, automobiles, petroleum products, and automobile accessories, food, and practically all articles of household and farm equipment are available through cooperative channels. The cooperators produce their own butter and sausage, in a federated association, and since September 1, 1937, burial service has been obtainable through a new department of the same association. In some of the towns of that county, virtually every family in the area belongs to the cooperative. This region presents one of the best and most complete examples of cooperative development to be found in this country—the result of many years' patient building and education.

At the other end of the scale are the communities where a credit union or one small struggling store represents the sum of cooperative activity. Between these two extremes are all degrees of development.

Extent of the Movement in 1936

Earlier studies by the Bureau included the store associations, housing, credit, and certain service associations such as burial, laundry, and restaurant associations. In the 1936 survey, for the first time, attempt was made to obtain general coverage for the telephone, electricity, and insurance associations, and for farmers' marketing associations doing collective purchasing of consumers' goods. In short, the purpose of the study was to present as complete a picture of the consumers' cooperative activities in the United States as the Bureau's resources would permit. The actual coverage obtained, based on the number of associations known to have been in operation at the end of 1936, ranged from about 43 percent for the telephone associations to over 86 percent for the credit unions.

Strictly speaking, all of the above classes of organizations were carrying on consumer activities and filling consumer needs of one kind or another. As generally considered, however, neither the credit unions nor the telephone or insurance associations are regarded as part of the consumers' movement proper. As a matter of fact, although a certain proportion of the telephone and insurance associations are organized as cooperatives and run as such, by far the larger proportion of them are cooperative only because of their conformity to the principles of mutuality, not because of their acceptance of the Rochdale philosophy.

The very large sample of associations reporting in all these fields enabled the Bureau to make, for the first time, detailed estimates of the total extent of the movement in this country. On the basis of the sample, it is estimated that there were at the end of 1936 some

3,600 associations engaged in retail distribution, of which 2,400 were stores and buying clubs and 1,150 were handling petroleum products. There were also some 500 service associations providing for their members such services as medical care, housing, burial, and serving of meals.

These local associations had gone into the wholesale field, also, setting up wholesale organizations for that purpose. In these wholesales the retail associations, not individual persons, were the members. About 1,900 local associations were affiliated in the 20 regional wholesales doing business in one or more States. Eighteen of the regional wholesales had, in turn, formed two "super" wholesales in order to obtain through them the advantages of the large-scale buying thus made possible.

In some districts the retail associations had formed federations to take over the distribution of certain commodities or to perform specific services. The 9 such federations were owned by 109 local associations.

It is estimated that the telephone and insurance associations doing business on a mutual or cooperative basis totaled 5,000 and 1,800 respectively, and the known credit unions reached a total of 5,440, at the end of 1936.

TABLE 1.—Estimated Number, Membership, and Business of Consumers' Cooperatives, 1936

Type of association	Number of associations	Number of members	Amount of business
<i>Local associations</i>			
Retail distributive associations.....	3,600	<i>Individuals</i> 677,750	\$182,685,000
Stores and buying clubs.....	2,400	330,500	107,250,000
Petroleum associations.....	1,150	325,000	69,985,000
Other distributive associations.....	50	22,250	5,450,000
Service associations.....	529	155,293	5,015,000
Associations providing rooms or meals or both.....	60	19,150	1,530,000
Medical-care associations.....	14	5,143	50,000
Burial associations.....	50	31,500	160,000
Housing associations.....	50	3,500	2,525,000
Electricity associations.....	275	82,500	(¹)
Miscellaneous.....	90	13,500	750,000
Telephone associations.....	5,000	330,000	5,485,000
Credit unions.....	5,440	1,212,127	112,442,297
Insurance associations.....	1,800	6,800,000	103,375,000
<i>Federations</i> ⁷			
Wholesale associations.....	31	<i>Associations</i> (¹)	37,278,032
Interregional.....	2	18	418,000
Regional.....	20	1,900	36,000,000
District.....	9	109	180,032

¹ Actual figure; not an estimate.

² Gross income.

³ Insufficient data to warrant computation of an estimate.

⁴ Amount of loans made.

⁵ Policyholders.

⁶ Gross premium income.

⁷ Does not include noncommercial federations, for which data were insufficient to warrant estimates.

⁸ Items cannot be totaled because subgroups are not mutually exclusive.

The combined membership of the local distributive and service associations is estimated to have exceeded 800,000, of which about 155,000 were in the service associations, and most of the remainder were about equally divided between the stores and the petroleum associations. The estimated business done by the local associations totaled some \$187,700,000, of which nearly 60 percent was accounted for by the store associations. The wholesale business by associations handling consumers' goods during 1936 was estimated at more than \$37,000,000.

In order to round out the picture, data are given in table 2 for the labor banks, mutual savings banks, and the whole group of mutual insurance associations, all of which have some cooperative features.

TABLE 2.—Semicooperative Organizations in the United States in 1936

Type of organization	Num-ber of organi-zations	Members	Amount of business, 1936	Share capital	Total assets	Net worth
Labor banks ¹	4	(²)	³ \$21,747,423	\$1,725,000	\$24,368,310	\$2,155,221
Building and loan associations ⁴	10,256	6,125,971	(²)	(²)	5,741,935,430	(²)
Mutual savings banks ⁵	566	⁶ 13,165,045	³ 10,059,951	18,587	5,113,633	1,716,097
Mutual insurance companies ⁷	1,279	(²)	⁸ 276,015,960	(²)	515,582,733	(²)

¹ Data furnished by Industrial Relations Section, Princeton University.
² No data.
³ Deposits.
⁴ Data furnished by United States Building and Loan League.
⁵ From Annual Report of the Comptroller of the Currency for year ended October 31, 1936; data are for June 30, 1936.
⁶ Depositors.
⁷ From Directory of Mutual Insurance Companies in the United States (fire and casualty), published by American Mutual Alliance, Chicago, Ill.; figures here given represent remainder after deduction of associations included in Bureau of Labor Statistics study.
⁸ Premiums written.

GEOGRAPHICAL DEVELOPMENT

There has been considerable variation in the development of different types of associations on a geographical basis. Store associations are now found in practically every State in the Union. They still appear in largest numbers in the North Central States, though smaller growth is found in New England, the Middle Atlantic States, California, and Washington. The petroleum associations also have reached their greatest development in the Mississippi Valley States, with only a few in the Mountain States; the East is almost barren of such organizations. The bakery societies on the other hand are all in the States of Massachusetts, New York, and New Jersey, although there are a few store associations in other parts of the country which run a bakery as one department of the merchandising business.

Cooperative housing has been concentrated in one metropolitan area—New York City. At the time the Bureau's survey was made

two associations had been formed in Wisconsin but had not progressed to the point of actual construction.

A group of petroleum and fuel-oil associations has developed in Texas. Aside from these, however, there was little cooperative activity in the South until the advent of the electricity associations formed under the rural electrification program. Of 28 States in which such associations had been formed and had received Rural Electrification Administration loans by the end of June 1937, 8 were Southern States. Practically all other sections of the country also had associations of this type except New England and California. Washington State, although not represented by associations under the Rural Electrification Administration, had a number of cooperative power associations which had been in existence for many years before that program was inaugurated.

Telephone associations are found here and there in nearly every part of the country, but the vast majority (80 percent) are in the North Central States. No other geographic division has as many as 5 percent of the total.

Credit unions also have been started in every State in the Union. Although New England was the birthplace of the cooperative credit movement in this country, that section has yielded first place as regards numbers of associations to the East North Central, and West North Central regions; these together accounted for more than two-fifths of the credit cooperatives existing at the end of 1936. In this connection it may be noted that although the South still has few distributive and service cooperatives, some of the States there have been very receptive to the idea of cooperative credit. Among these may be cited Florida, North Carolina, Tennessee, and Texas, each of which had more than 100 credit unions in operation at the end of 1936. The expansion of the credit-union movement was greatly facilitated by the passage of the Federal Credit Union Act, in June 1934. In the year and a half between that time and the end of 1936 nearly 1,700 associations had been formed under that act, whereas State associations (dating from as early as 1908) numbered only 3,575.

Much of the cooperative development is in rural sections. Most of the telephone associations and a large proportion of the insurance associations are in the country or in small towns. The electricity associations are almost entirely rural. Analysis of the store associations and their members, in relation to population, indicated that of 1,668 associations in cities, towns, and villages, more than three-fourths of the associations, over three-fifths of the membership, and nearly three-fourths of the business done in 1936 was in places with a population of 5,000 or less. For the whole group the cooperative membership¹ formed 0.92 percent of the total population in places

¹ Members only; not counting their families.

where the associations were located. However, although the co-operators formed only 0.05 percent of the population in cities of a million or over they formed about 11 percent in places of 1,000-5,000, nearly 24 percent in places of 500-1,000, and 47 percent in places of less than 500.

The bakeries, creameries, housing associations, restaurants, medical-care associations, and credit unions were practically all in industrial centers. As the above figures indicate, the large cities have proved to be the most difficult locale in which to obtain a foothold for the store societies. There are several reasons for this: The efficiency of private retail distribution; the low prices in the chain stores, with which the cooperative with its small purchasing power cannot compete on a price basis, unless it has the advantage of a cooperative wholesale in nearby territory; the difficulties of bringing city people together in homogeneous groups and of contending with long-established buying habits of the housewife.

That cities are not invulnerable to cooperative attack, however, is attested by the growing number of American cities in which there are associations of some size that are in apparently successful operation. Even in Great Britain the city of London was long regarded as impregnable. But in 1936 it had a city-wide society with 631,464 members—a number sufficient in itself to populate a large city—and its sales exceeded 60 million dollars (two-fifths of the sales of all the retail cooperatives in the United States combined) in that year.

In the United States the buying club is being utilized as the approach to cooperative development in the cities. This method has the advantage of being very simple in operation, requires no financial investment and consequently involves no financial hazard, and offers a means of obtaining experience in the technique of cooperation. Part of the savings realized from the pooling of the members' orders is retained in the common treasury, to be used in starting a store when the members feel that the time is ripe to do so.

AGE AND SIZE OF ASSOCIATIONS

Because they see small associations spring up here and there and die out in a few months or a few years, many people are inclined to regard the whole cooperative movement as an ephemeral one. It is therefore of interest to note that of the associations reporting in 1936 there were 379 organizations that had been formed during the period of high but largely uninformed enthusiasm of the period 1916-20 and there were 229 others that had survived from even earlier periods. Two associations had been in business 59 and 60 years, respectively. Nearly 45 percent of the reporting associations, however, had been formed since the beginning of the depression that started in 1929.

On the average, the retail distributive associations in the United States are small. In 1936 the average membership of the store associations was 219, of the petroleum associations 335, and of all retail distributive associations combined, 257. About 70 percent had fewer than 250 members, and only 3.5 percent had attained what would in Great Britain be considered a fair-sized association (1,000 members or more).

Seven retail distributive associations (including three handling students' supplies only) had sales in 1936 of over one million dollars each. For all distributive associations combined, the average annual sales per association were \$81,058, and nearly half of the total had sales falling within the range of \$25,000–\$100,000.

PATRONAGE REFUNDS

The level of charges, volume of business, operating margins, and business efficiency all influence the amount of net savings made. As already stated, the practice of the distributive associations is to charge the regular current prices for the merchandise handled by them and to return all or part of the net surplus remaining, after expenses and reserves are covered, to their members in proportion to patronage. This practice is not so common among the service associations, many of which set their scale of charges only high enough to cover the overhead. This was true also of the telephone associations. The insurance associations operating on the assessment basis levied assessments only sufficient to cover actual losses and expenses, and those collecting advance premiums had set these at levels considerably below the "manual" rates.

About 72 percent of all the retail distributive associations reporting were able to make net savings on the 1936 operations, but slightly over 7 percent of the total sustained losses.

Possibly because of the relatively larger margins of profit and the less involved type of business, the Bureau found that a larger proportion of petroleum associations than of the store associations were able to make net savings and their patronage refunds were at a higher rate. In the store associations the most common rates of patronage refunds were from 2–6 percent, whereas in the petroleum associations the largest groups paid refunds ranging from 5–6 to 10–11 percent; these rates, it should be emphasized, represented percentages of sales, not of share capital.

What these refunds meant to the individual member is indicated by the fact that, for the associations reporting the amount returned on 1936 patronage, the average received by each member in the store associations of all kinds was \$13.42 and for the petroleum associations was \$13.87. Individual members received patronage refunds of as much as \$150.

A larger proportion of petroleum associations than of store associations—62.6 as compared with 38.4 percent—made patronage refunds. For the whole group of retail distributive associations the proportion returning patronage refunds was slightly over 44 percent. The failure of the other associations which had net savings on the year's business to make refunds on patronage may have been due to a number of causes, such as use of the surplus to make up deficits in previous years, to provide additional working capital for the organization, to build up reserves, to construct or purchase new buildings, new equipment, or to expand into new lines of operation. In every case where such a plan was adopted, it was, of course, on the members' own vote.

Naturally the economic conditions during the depression affected adversely the ability of the associations to make patronage refunds. Nevertheless some associations made such refunds throughout the depression; and others could have done so but preferred to use the surplus to strengthen the financial position of the association.

The rate of interest that credit unions may charge is limited by the laws under which they operate. The most common maximum is 1 percent per month, calculated on the unpaid balance. Reports to the Bureau indicated that some 60 percent were charging the maximum rate of 1 percent per month and about 20 percent were charging $\frac{1}{2}$ percent per month. As the operating expenses of credit unions are very low, these rates yield a gain from which shareholders are remunerated. Credit-union practice differs from general cooperative practice in that such returns are made on share capital and not on patronage.

Trends in Cooperative Development

DEVELOPMENT FROM 1933 TO 1936

The Bureau's latest previous study of cooperatives was made in 1933—at the low point of the depression. In contrast, the year 1936 was a year of considerable recovery which was reflected in the status of the cooperatives.

The depression had the usual effect of depressions upon the cooperative movement. Cooperative associations are predominantly working-class organizations and as such are peculiarly sensitive to conditions affecting the employment and income of the workers. A substantial number of associations were wiped out by the results of unemployment, bank failures, failures of employing firms, and the general hard times which their resources were not sufficient to overcome. The stable and well-established associations, though severely affected, managed to survive and some were able, as well, to extend their operations. Also, there appeared the usual crop of new associations which always follows in the wake of a depression, when people begin to cast about for a means of eking out reduced incomes. The accessions

resulting from the depression of 1929-34, however, exceeded by far those in any period since the Bureau has been studying the movement.

Although the development of the distributive branch of the movement has proceeded at an uneven pace in different parts of the country, its momentum has greatly increased in the past few years. Distributive cooperatives at the end of 1936 represented not only a more extensive but also a sounder development than at any time since the Bureau first began to follow the movement, in 1918.

It should be pointed out in this connection that there is in general a considerable difference in the picture presented by the associations which are affiliated to the organized movement and in that presented by the large number of scattered associations that are either unaware of the existence of cooperative wholesales and regional leagues or are not yet persuaded of their value. Among the associations that are members of cooperative educational or commercial federations, more and more emphasis is being laid upon education of members and employees, upon better accounting systems, and greater operating efficiency. Most of the larger and more stable organizations in the United States are part of these organized groups. The Bureau's field studies, however, disclosed that the independent, isolated associations were in general far below the level of the federated associations in business efficiency, size, volume, financial stability and operating results. A certain proportion of the movement disappears each year through failure or voluntary dissolution, but among the increasingly large number of associations which have realized the advantages of federation and have utilized to the full the wholesaling, auditing, and other facilities thus available, failures are becoming fewer and fewer.

The credit unions represent a fast-growing phase of cooperation. Their growth during the past few years has been accelerated by the passage of the Federal Credit Union Act. Possibly, also, their formation has been speeded by the depression, the increased need of the small borrower for credit, and the losses from bank failures.

The telephone associations, on the other hand, are not an expanding group. One of the older forms of cooperative activity, the telephone association filled a real need in the early days when there were wide rural areas without telephone communication. With increasing density of population, the private companies have taken over more and more of the service, cooperative associations have disbanded or been bought by private interests, and each succeeding telephone census has shown a decreased number of companies but an increase in the proportion of telephones served by the larger operating units. Duplication of telephone service is not favored by most public regulatory bodies. Undoubtedly, there are still areas in which expansion or creation of cooperative telephone facilities is possible, but in the very nature of things such opportunities cannot be great.

TREND SINCE 1934, IN IDENTICAL ASSOCIATIONS

Not only was the distributive movement expanded in 1935 and 1936 by reason of the formation of new associations, but there were also increases in average membership and average sales. Of 1,475 retail distributive associations reporting membership in both 1935 and 1936, 58.8 percent showed increases in number of members, 27.4 percent showed no change, and only 13.8 percent had a loss. There were 1,238 associations reporting amount of business for both years; of these 78.6 percent increased their sales and 21.4 percent suffered a decrease.

The following table is based upon identical distributive associations, i. e., those that furnished membership data for both 1935 and 1936 and those that reported on sales for all three years 1934 to 1936. As the table shows, the combined membership of the retail distributive associations increased 7.2 percent from 1935 to 1936. Sales increased 19.8 percent from 1934 to 1935 and 16.0 percent from 1935 to 1936—a total rise of 39.0 percent during the 3-year period. All types of retail distributive associations benefited by this increase but the petroleum associations registered the greatest relative gain, both in membership and in sales.

TABLE 3.—Percent of Increase in Membership and Sales of Identical Distributive Cooperatives in Specified Periods

Type of association	Percent of increase in—			
	Member- ship, 1935 to 1936	Sales		
		1934 to 1935	1935 to 1936	1934 to 1936
Retail distributive associations.....	7.2	19.8	16.0	39.0
Store associations.....	7.3	18.8	16.5	38.3
Petroleum associations.....	7.9	26.1	20.1	51.4
Distributive departments of marketing associations.....	3.8	13.5	7.6	22.2
Wholesale associations.....	8.3	50.9	23.7	85.9
Interregional.....	80.0	11.5	12.0	24.9
Regional.....	7.9	51.2	23.5	83.4
District.....	12.2	48.6	37.3	104.2

The record of the identical retail distributive associations was exceeded by that of the wholesales. They increased the number of their member associations 8.3 percent and their sales 23.7 percent from 1935 to 1936; in the 3-year period 1934–36 their business rose 85.9 percent.

DEVELOPMENT IN PERIOD 1920 TO 1936

Index numbers of aggregate sales, net earnings, and patronage refunds of store associations and petroleum associations are shown in table 4. This shows in graphic fashion the effects of the depressions

of 1920-21 and 1929-34 upon the business of the cooperative stores. Beginning with 1922 the sales of the cooperative stores continued steadily upward until 1929 and declined only slightly in 1930, from which point they fell precipitately during the next 2 years but only slightly from 1932 to 1933. Beginning with 1933 they improved decidedly each year through 1936.

An interesting feature is that although net earnings fell in 1932 to less than one-third of the 1929 level, even 1933 (at the trough of the depression) showed an improvement over 1932.

The gasoline associations being a much newer type of cooperative business, which began only in the early 1920's, naturally showed a much sharper upward swing in sales than did the stores, as the movement gathered momentum. This momentum continued into 1930 and carried petroleum sales to nearly 15 percent above the 1929 level in that year. It was only in 1931 that a decline began.

Neither sales nor earnings declined in the petroleum associations to as low a point as was true in the stores. Also, whereas the store group as a whole had not regained in 1936 the 1929 level as regards either volume of business or net earnings, the petroleum associations not only had passed the 1929 level but had considerably surpassed their previous peak year of 1930.

It should be noted that a number of individual store associations reporting to the Bureau had sales in 1936 substantially above any previous year in their history.

TABLE 4.—*Indexes¹ of Sales, Net Earnings, and Patronage Refunds of Store and Petroleum Cooperatives, 1920-36*

[1929=100.0]

Year	Retail store associations			Petroleum associations		
	Sales	Net earnings	Patronage refunds	Sales	Net earnings	Patronage refunds
1920.....	76.1					
1921.....	66.1					
1922.....	63.9					
1923.....	70.7					
1924.....	75.1					
1925.....	82.3	84.0	88.1	38.6	34.5	30.3
1926.....	88.3	90.2	82.6	54.0	51.3	54.8
1927.....	93.0	89.9	91.5	62.9	52.0	51.0
1928.....	98.1	94.5	97.3	79.4	51.7	57.4
1929.....	100.0	100.0	100.0	100.0	100.0	100.0
1930.....	97.4	97.4	93.1	114.6	145.2	146.6
1931.....	76.7	65.6	82.7	103.5	111.7	120.4
1932.....	59.7	30.2	83.3	95.0	79.2	101.3
1933.....	55.5	34.3	58.1	93.4	74.5	101.6
1934.....	64.2	54.0	81.8	114.9	86.2	122.1
1935.....	75.2	60.8	92.5	142.9	94.7	142.7
1936.....	87.5	87.6	129.8	168.8	115.7	173.9

¹ Indexes computed on the chain system, i. e., on reports from identical associations from one year to the next.

Compared to the situation in 1920, when the Bureau of Labor Statistics made its first study of the movement, the following may be noted:

Today more associations are formed only after extended educational work (issuance of pamphlets, holding of meetings, formation of study groups, etc.) than was formerly the case. Reliance upon practical facts has to a large extent supplanted the unthinking enthusiasm and exaggerated claims that characterized the early period.

There is now greater realization of the advantages of federation both for education and for business purposes. Fewer than 200 associations were affiliated with the national body—the Cooperative League—in 1920, and almost none of these were in a position to pay dues for its support. In 1936 the league had some 1,500 dues-paying member associations, and there were about 1,900 associations which were members of the various wholesales.

In 1921 cooperative wholesaling, which had seemed to be on the upgrade a year or two before, was at very low ebb. There were still several subjobbing organizations, and two farmers' wholesales (which handled consumers' goods) operating in one State each, but all but one of the regional or State wholesales connected with the consumers' movement proper had either already gone down in the crash of the National Cooperative Wholesale or were so deeply involved financially that their remaining period of existence was a matter of only a few years at best. By 1936 cooperative wholesaling had revived in a most spectacular manner and represented one of the most successful phases of consumers' cooperation.

Largely because of the continued efforts of both the educational federations and the wholesales, the business practices of local associations have undergone a noteworthy change for the better. The Bureau's 1920 report noted an almost incredible lack of knowledge of the most elementary principles of accounting, which in some cases proved fatal or nearly fatal to the organization. One of the more common of these was the failure to include the share capital as a liability. Others were simply mathematical errors. Thus, one association, through such an error, showed on its balance sheet an apparent profit of \$7,074; as a matter of fact it had a loss of nearly \$5,900. On the strength of the report, however, the illusory "profit" was distributed to the members in patronage refunds. The association never recovered from this misstep, but went into bankruptcy a few years later.

Such elementary mistakes were very few in number among the financial reports received in 1936. There was still a certain proportion of associations in which improvement in accounting methods was badly needed. Thus, one of the Bureau's investigators found that in a small miners' association visited in Pennsylvania no records of the transactions had ever been kept; he found also that there had never

been any net earnings. This association was started in 1929; it had always been operated entirely with volunteer help. In 1936 it had 29 members and its business in that year amounted to approximately \$10,000 (as nearly as the secretary could estimate). The wonder is that it had lasted for 7 years. Again, a farmers' store formed in the early 1920's had never had its books audited and the investigator reported that the "manager didn't seem to know much about the financial condition of the association." Another had an audit in 1936 for the first time since it began business, in 1930. In a Wisconsin association "the books were in very poor condition, so that it was difficult to get exact figures; they carried a large amount of accounts receivable, some of which were quite old." In another organization evidently very little check was kept on financial matters, for it was reported that the secretary-treasurer had embezzled \$3,024 in 2 years and then committed suicide when about to be exposed.

These were extreme cases and few in number. Whereas in 1920 only 35 percent of the associations subjected their books to periodic audit by an independent expert accountant, in 1936 this was true of over 76 percent of the associations.

Operation on the hazardous cost-plus basis has decreased almost to the vanishing point. Under this method, instead of operating at current prices, the association sets its price level at cost plus a percentage estimated as sufficient to cover expenses. Cooperatives have come to realize, however, that this method allows no margin for building up reserves for expansion or unexpected losses, and that it is almost impossible to ascertain in advance what the cost of operation will be.

Increasing numbers of associations have demonstrated the feasibility of abolition of credit sales, with the corollary, surprisingly enough, of increased sales in some cases. In certain places the return to a strictly cash basis has been accomplished with the aid of a newly formed credit union which fills the members' need for credit.

In both 1925 and 1936 about 70 percent of the reporting distributive associations were able to make a net gain on the year's operations, but whereas only 40 percent returned patronage refunds in 1920, 48 percent did in 1936.

The most common rate of stock turn in 1920 was between three and four times. In 1936 it was between 10 and 13 times.

On the other hand there are still many ways in which individual associations can make improvement: Some of the older associations are inclined to rest upon their laurels, to discount the value of the continuous educational work that is necessary to bring in new members and to make convinced cooperators of them, and to rely exclusively upon financial benefits to keep the membership loyal. Certain associations, including several which have been outstandingly successful in a business way, have allowed the responsibility and authority to

drift into the hands of the manager and have in fact become "one-man" associations. Such organizations are not on a sound basis, and face an uncertain future when the manager's days are over.

The average capitalization is still too small, in many cases, to allow the associations to realize their potential achievements. They struggle along, in a hand-to-mouth existence, unable to take the discounts earned by cash buying or to make advantageous purchases, and without sufficient funds to make needed improvements or to expand into new fields. The wage earners who, by and large, are the members of the cooperatives, ordinarily have very little funds to invest, it is true. But it is also true that what money they have they feel must be placed where it can be withdrawn in an emergency, and this has not generally been the case with the share capital of cooperative associations.

Also, the working conditions, both hours and wages, will in many cooperatives bear improvement.

The field work revealed a considerable number of associations which need to improve their "housekeeping," bearing in mind that dingy, unkempt, and carelessly displayed stocks attract neither members' nor nonmembers' patronage. Many of the stores visited would be benefited by increased attention to attractive windows, well-arranged goods, and a general paint-up campaign. One of the most common observations made by the field workers was the crowding of too many commodities into cramped quarters, giving the whole store an untidy, cluttered appearance. (In some districts the cooperatives have adopted a distinctive sign, a uniform, attractive color scheme, and up-to-date fixtures and store lay-out, with the result that the cooperative store compares favorably with any of its competitors.)

REFUGEE LABOR MIGRATION TO CALIFORNIA, 1937

By PAUL S. TAYLOR and EDWARD J. ROWELL¹

IN THE 33 months from July 1935 to March 1938 more than 200,000 migrants "in need of manual employment" streamed west from the drought States along the highways to California. The powerful impulse of droughts which reached catastrophic proportions in 1934 and 1936 has forced these and other thousands to emigrate in search of economic opportunity. But the dramatic, compelling, and pervasive power of nature should not be allowed to obscure the presence of other deep-seated causes of the dislocation of those whom we have been accustomed to call "drought refugees."

Among these other causes are the accumulated forces of years of agricultural depression, and now the beginning of mechanization in the Cotton Belt. As mechanization spreads, substituting machines for men, it bars the return of those expelled earlier by drought and by depression. It also dislodges more thousands of refugees.

This study carries through 1937 the statistical record and analysis of the refugee and labor migration to California described in previous articles.² For over 2¼ years there has been available a fortnightly check on the number of migrants in need of manual employment entering California by motor vehicle. This border count, made available through the Bureau of Plant Quarantine, California Department of Agriculture, has been the only numerical index to the magnitude of the problem. A perspective of the movement covering a period of almost 3 years should afford some clue as to its future direction and stimulate thought directed toward coping with the problems following in its wake.

Number of Migrants

Between July 1, 1935, and March 31, 1938, 241,930 individuals (i. e. migrants in need of manual employment and members of their families), residents of other States, entered California. In addition, during the same period some 42,812 Californians of comparable economic status who had departed, reentered the State. In considering these figures there is an important question as to the extent to which they represent a net increase in the State's population. Return-

¹ Professor Taylor, of the University of California, is consultant to the Social Security Board, and Dr. Rowell is regional labor relations adviser of the Farm Security Administration.

² See *Monthly Labor Review*, February 1936 (p. 312) and March 1937 (p. 537).

ing Californians largely represent a shuttling movement of workers and their families into and out of the State. It is doubtful, however, that the same thing is true of the out-of-State immigrants; certainly it is not true to anything like the same degree. Even were it true the implications of such a movement would be no less serious, but all indications are that the net migration is of a magnitude to compel the greatest attention. The tremendous surpluses of agricultural labor now evident in the rural areas of the State, the numerically insignificant results of the attempt of relief agencies to return out-of-State migrants to their places of former residence, the increasing burden of Federal agencies equipped to care for nonresidents, and the steadiness with which the influx has been maintained all indicate that most of the migrants abandon, at the time of their departure, thoughts of return to their home States.

Recent developments in the State of Arizona give promise that similar border counts may soon be instituted there. Since Arizona is the principal channel of migration for this "refugee" labor, such a count will unquestionably shed light on the "net" migration to California and, in conjunction with the California count on the Arizona border, will aid in determining the extent to which Arizona is acquiring a residue of migrants. It has been authoritatively estimated that close to 30,000 out-of-State migrants entered Arizona during the past fall and winter for the purpose of harvesting cotton and other crops.

During the 33-month period, roughly a quarter of a million persons entered California. As shown in table 1, some 42,000 immigrated in the last half of 1935, 85,000 in 1936, 90,000 in 1937, and 24,000 in the first quarter of 1938. The movement has been characterized by its steadiness throughout the period rather than by violent fluctuations. Momentarily disregarding the data for 1936 the extreme range in magnitude of quarterly migrations was not more than a third of the average quarterly migration. Excluding the year 1936, the minimum quarterly influx was 18,317 in the last quarter of 1935, and the maximum 25,110 in the last quarter of 1937. This range is 6,793, or about 400 less than one-third of the average quarterly influx of 21,993.

The returns for the year 1936 which show a considerably greater range, from 13,427 in the first quarter to 29,586 in the third quarter, must be regarded as reflecting in part the consequences of an ill-conceived attempt to curb immigration in the spring months of that year. The effect seems to have been to aggravate the usual seasonal decline in the spring and to delay entry into California until the control was removed, rather than to reduce the total entries to California during the year. Many, deterred from entering California, simply bided their time in Arizona or elsewhere. In all probability, the fluctuations in 1936 would have paralleled those of 1937 had not the statistically accidental factor of the "border patrol" interfered.

TABLE 1.—Migrants "in Need of Manual Employment" Entering California by Motor Vehicle, by States, July 1, 1935–Mar. 31, 1938¹

State of origin	Total, 33 months		1935: Last 6 months	1936	1937	1938: First quarter
	Number	Percent				
All States excluding California:						
Number.....	241,930	100	42,559	84,833	90,761	23,777
Percent.....	100.0		17.6	35.1	37.5	9.8
Drought States.....	205,477	84.9	32,185	73,187	78,332	21,773
Oklahoma.....	58,153	24.0	7,561	22,989	21,709	5,894
Texas.....	24,559	10.1	3,631	8,304	8,723	3,901
Arizona.....	25,018	10.3	3,097	7,329	10,613	3,979
Arkansas.....	19,204	7.9	2,866	6,890	7,232	2,216
Missouri.....	16,205	6.7	2,426	5,873	6,316	1,590
Kansas.....	11,128	4.6	2,238	3,900	4,484	506
Colorado.....	8,393	3.5	1,584	2,249	3,702	858
New Mexico.....	7,616	3.1	1,578	2,440	2,680	918
Nebraska.....	7,651	3.1	1,258	3,019	3,024	350
Idaho.....	5,258	2.1	1,193	1,733	2,012	320
Montana.....	3,038	1.3	834	969	1,102	133
Utah.....	3,027	1.3	678	1,069	1,063	217
Iowa.....	3,368	1.4	703	1,474	1,024	167
Nevada.....	2,342	1.0	502	614	923	303
North Dakota.....	2,346	1.0	532	912	834	68
Minnesota.....	2,086	.9	487	825	707	67
South Dakota.....	2,824	1.2	468	1,067	1,164	125
Wyoming.....	1,836	.8	337	738	659	102
Wisconsin.....	1,425	.6	212	793	361	59
Pacific States.....	22,476	9.3	5,822	6,685	8,831	1,138
Oregon.....	14,305	5.9	3,629	4,384	5,592	700
Washington.....	8,171	3.4	2,193	2,301	3,239	438
Industrial States.....	8,891	3.7	3,106	3,261	2,091	433
Illinois.....	2,617	1.1	818	1,066	605	128
Michigan.....	2,068	.9	658	827	456	127
New York.....	968	.4	486	274	186	22
Ohio.....	1,260	.5	436	468	259	97
Indiana.....	1,128	.5	319	444	331	34
Pennsylvania.....	578	.2	278	106	188	6
New Jersey.....	272	.1	111	76	66	19
Southern States.....	4,492	1.9	1,205	1,516	1,346	425
Tennessee.....	1,084	.4	298	371	294	121
Georgia.....	464	.2	207	140	96	21
Louisiana.....	672	.3	145	190	258	79
Florida.....	405	.2	95	176	98	36
Alabama.....	457	.2	120	153	137	47
Kentucky.....	421	.2	101	152	137	31
Mississippi.....	358	.1	71	143	101	43
Virginia.....	103	(²)	57	23	23	-----
West Virginia.....	91	(²)	32	29	19	11
Maryland.....	109	(²)	29	50	24	6
North Carolina.....	194	(²)	15	58	109	12
District of Columbia.....	49	(²)	19	16	14	-----
South Carolina.....	80	(²)	16	12	34	18
Delaware.....	5	(²)	-----	3	2	-----
New England States.....	594	.2	241	184	161	8
Massachusetts.....	278	.1	113	79	86	-----
Rhode Island.....	58	(²)	31	10	17	-----
Maine.....	43	(²)	40	-----	3	-----
Connecticut.....	151	(²)	36	67	40	8
Vermont.....	36	(²)	13	15	8	-----
New Hampshire.....	28	(²)	8	13	7	-----
California.....	42,812	-----	9,901	12,839	14,215	5,857

¹ Data collected by border inspectors of Bureau of Plant Quarantine, California Department of Agriculture.² Less than 1/10 of 1 percent.

Practically 85 percent of the migrants come from States classed as "drought States" by the F. E. R. A. in 1934. Oklahoma alone was the State of origin of 58,143, or 24 percent, and in combination with Texas, Arizona, and Arkansas accounted for over 50 percent of all out-of-State migrants. Less than 4 percent came from the indus-

trial States, less than 2 percent from the southern States, and only 0.2 percent from New England. The remainder, 9.3 percent, came from the Pacific States of Washington and Oregon.

Certain revisions are required with respect to earlier observations as to the causes of the migrations. The coincidence that most of the migrants came from the so-called drought States led to the tentative conclusion that the drought itself was chiefly responsible. The unabated persistence of the influx throughout the year 1937 (table 2), a year during which the drought areas were greatly restricted, leads to the conclusion that, important though it was, drought was but a final straw added to fundamental changes that have been transpiring during the last decade and a half. The more plausible explanation of the movement now seems to be that it is the cumulative result of low cotton prices in the immediate post-war period and in 1932, the droughts of 1934 and 1936, and a growing use of mechanical apparatus, particularly the all-purpose tractor, in the areas of greatest emigration. These factors, in combination, reasonably account for a decline in economic status leading eventually to complete severance of all ties and to migration as a means of escape from a permanently constricted sphere of economic activity.³

Revision should also be made with respect to analysis of emigrations from Arizona. It was earlier believed that the Arizona migrants were chiefly participants in a seasonal interstate migration between California and Arizona. It is true that the winter lettuce season in Imperial Valley and the later spring lettuce harvest of the Salt River Valley in Arizona, that the early summer cantaloupe harvest in Imperial Valley and the fall cotton harvest in the Salt River Valley, Casa Grande area, and other parts of Arizona, provide the basis for a natural interstate flow of migrant agricultural workers. But, in addition, Arizona provides an ideal wintering place for migrants en route from States farther east. The cotton harvest, which lasts from September till as late as March, is a crop with which most of the migrants are familiar and which affords them an opportunity to replenish impoverished larders and to accumulate the means for continuing their travels. At the same time the winter climate in Arizona is extremely equable. Therefore many of the migrants recently dislodged from other States remain in Arizona past the turn of the year and consequently acquire Arizona license plates for their cars. The fact that April, May, June, and July are the months of greatest immigration from Arizona confirms this observation.

³ See Monthly Labor Review, March (p. 595) and April (p. 852) 1938. Farm-tractor sales for use in the United States reached the record volume of \$171,000,000 in 1936. In 1937 a new record of \$214,000,000 was established. Between 1937 and 1938 farm tractors in use in the United States increased 10.5 percent. In the 10 southern cotton States they increased 13.3 percent. In 1930 the proportion of all farm tractors which was found in the cotton States was only 12.2 percent. By 1937 it had advanced to 15.2 percent (incorrectly given as 18.5 percent in Monthly Labor Review for April 1938, p. 865), and in 1938 it rose again to 15.6 percent. Between 1930 and 1937, the number of farm tractors in the United States rose only 50.3 percent (incorrectly given as 23.7 percent), as compared with an increase of 89.7 percent in the cotton States.

Table 2, showing the number of migrants entering the State of California by months throughout the year 1937, also indicates that seasonality probably is not so important as at first suspected. The sharp decline of the spring months in 1936 and the extreme peak in the fall of that same year are considerably leveled out in the case of 1937. Again it must be concluded that the 1936 tendencies were the result of artificial barriers rather than of a natural movement. Nevertheless, even in 1937 the movement in the fall months was somewhat greater than in the late winter months of January and February.

TABLE 2.—*Returning Californians and Out-of-State Migrants "in Need of Manual Employment" Entering California, by Months, June 16, 1935–Mar. 31, 1938*¹

Month	1935		1936		1937		1938	
	Return- ing Califor- nians	Out-of- State mi- grants	Return- ing Califor- nians	Out-of- State mi- grants	Return- ing Califor- nians	Out-of- State mi- grants	Return- ing Califor- nians	Out-of- State mi- grants
Total.....	11, 004	46, 013	12, 839	84, 833	14, 215	90, 761	5, 857	23, 777
January.....			2, 663	6, 774	1, 053	4, 949	2, 903	8, 724
February.....			674	3, 126	559	5, 701	1, 494	7, 583
March.....			625	3, 527	387	7, 752	1, 460	7, 470
April.....			616	4, 719	764	7, 242		
May.....			629	4, 895	999	8, 299		
June.....	² 1, 103	3, 454	816	6, 079	999	7, 908		
July.....	2, 473	7, 754	1, 038	7, 380	1, 392	8, 035		
August.....	1, 713	8, 773	957	9, 657	1, 551	8, 156		
September.....	1, 735	7, 715	1, 580	12, 549	1, 461	7, 609		
October.....	1, 238	5, 730	1, 441	11, 848	1, 724	8, 302		
November.....	1, 658	7, 157	869	8, 053	1, 787	9, 917		
December.....	1, 084	5, 430	931	6, 226	1, 539	6, 891		

¹ Data collected by border inspectors, Bureau of Plant Quarantine, California Department of Agriculture.

² One-half month only.

Family Composition and Race of Migrants

Border data, as arranged in table 3, show the predominantly family characteristic of the migrants. Of the 259,654 migrants who entered the State between June 16, 1935 and December 31, 1937, 42,449 traveled singly and 217,205 as members of family groups. During this period of 2½ years there was no marked change in the relative proportion of single individuals to families. However, it is probable that the number of single individuals entering the State is concealed by their attachment in some cases to family groups, and that the actual number of single persons greater than shown.

There seems to be some slight tendency toward an increase in the number of passengers per car. In 1935 the average was 4.1, in 1936 it was 4.6, and in 1937 it rose to 4.7. Migrants from Oklahoma, Arkansas, and Missouri had an appreciably higher number of passengers per car than the travelers from the other States which are important sources of emigration.

The great majority of the migrants are of the white race, and observation confirms that they are of native American stock. Mexican

migrants are principally returning Californians, Arizonians, Texans, and New Mexicans. They constitute, however, less than 4 percent of the migrants. The Filipinos rank immediately after the Mexicans in importance, and they travel characteristically as individuals. Negroes lag in numbers behind the Mexican and Filipino groups, but it is possible that the Negroes may play an increasingly important role in the future.

TABLE 3.—Migrants "in Need of Manual Employment" Entering the State of California by Motor Vehicle via Border Stations, June 16, 1935–Mar. 31, 1938, Classified by Race and Family¹

Month	Total number of—		White		Colored		Mexican		Filipino		Other	
	Cars	Pas-sengers	Singles	In family	Sin-gles	In family	Sin-gles	In family	Sin-gles	In family	Sin-gles	In family
Total.....	63, 123	289, 299	39, 775	226, 663	1, 008	3, 155	1, 665	11, 221	3, 860	397	93	1, 462
1935 ²	13, 676	57, 017	9, 297	41, 702	181	520	451	3, 135	1, 122	161	72	376
1936.....	21, 378	97, 672	12, 729	77, 200	396	1, 045	533	3, 313	1, 642	151	13	650
1937.....	22, 167	104, 976	14, 232	83, 505	284	1, 192	521	3, 788	979	77	8	390
1938 ³	5, 902	29, 634	3, 517	24, 256	147	398	160	985	117	8	-----	46

¹ Data collected by border inspectors, Bureau of Plant Quarantine, California Department of Agriculture.

² June 16 to Dec. 31.

³ First quarter only.

Routes of Entry

Roughly, 6 of every 10 migrants entering California do so via highways crossing the State of Arizona. The routes of entry of the remainder are divided almost equally between Oregon and Nevada. The preponderant use of Arizona as a route of entry is explained by the geographic origin of the great majority of the migrants and to the existence of greater work opportunities while enroute through Texas, New Mexico, and Arizona (particularly the last-named) during the fall and winter months. To a lesser extent the volume of the flow across the Arizona border is also affected by seasonal exchanges of agricultural workers between California and Arizona.

Returning Californians weight materially the number of migrants entering the State via the Oregon border. For out-of-State migrants, Nevada is a more natural route than Oregon, and almost two such migrants come via Nevada for every one that enters via Oregon. In contrast, Californians returning across the Oregon border outnumber those returning through Nevada to such an extent as almost to wipe out the difference in out-of-State migrants and thus equalize the total flow of migrants across the borders of the two States.

Occupational Status of Refugees

The S. R. A. of Imperial County, Calif., has tabulated the previous occupational status of the heads of the 320 transient families who

Table 2, showing the number of migrants entering the State of California by months throughout the year 1937, also indicates that seasonality probably is not so important as at first suspected. The sharp decline of the spring months in 1936 and the extreme peak in the fall of that same year are considerably leveled out in the case of 1937. Again it must be concluded that the 1936 tendencies were the result of artificial barriers rather than of a natural movement. Nevertheless, even in 1937 the movement in the fall months was somewhat greater than in the late winter months of January and February.

TABLE 2.—*Returning Californians and Out-of-State Migrants "in Need of Manual Employment" Entering California, by Months, June 16, 1935–Mar. 31, 1938*¹

Month	1935		1936		1937		1938	
	Return- ing Califor- nians	Out-of- State mi- grants	Return- ing Califor- nians	Out-of- State mi- grants	Return- ing Califor- nians	Out-of- State mi- grants	Return- ing Califor- nians	Out-of- State mi- grants
Total.....	11,004	46,013	12,839	84,833	14,215	90,761	5,857	23,777
January.....			2,663	6,774	1,053	4,949	2,903	8,724
February.....			674	3,126	559	5,701	1,494	7,583
March.....			625	3,527	387	7,752	1,460	7,470
April.....			616	4,719	764	7,242		
May.....			629	4,895	999	8,299		
June.....	² 1,103	3,454	816	6,079	999	7,908		
July.....	2,473	7,754	1,038	7,380	1,392	8,035		
August.....	1,713	8,773	957	9,657	1,551	8,156		
September.....	1,735	7,715	1,580	12,549	1,461	7,609		
October.....	1,238	5,730	1,441	11,848	1,724	8,302		
November.....	1,658	7,157	869	8,053	1,787	9,917		
December.....	1,084	5,430	931	6,226	1,539	6,891		

¹ Data collected by border inspectors, Bureau of Plant Quarantine, California Department of Agriculture.

² One-half month only.

Family Composition and Race of Migrants

Border data, as arranged in table 3, show the predominantly family characteristic of the migrants. Of the 259,654 migrants who entered the State between June 16, 1935 and December 31, 1937, 42,449 traveled singly and 217,205 as members of family groups. During this period of 2½ years there was no marked change in the relative proportion of single individuals to families. However, it is probable that the number of single individuals entering the State is concealed by their attachment in some cases to family groups, and that the actual number of single persons greater than shown.

There seems to be some slight tendency toward an increase in the number of passengers per car. In 1935 the average was 4.1, in 1936 it was 4.6, and in 1937 it rose to 4.7. Migrants from Oklahoma, Arkansas, and Missouri had an appreciably higher number of passengers per car than the travelers from the other States which are important sources of emigration.

The great majority of the migrants are of the white race, and observation confirms that they are of native American stock. Mexican

migrants are principally returning Californians, Arizonians, Texans, and New Mexicans. They constitute, however, less than 4 percent of the migrants. The Filipinos rank immediately after the Mexicans in importance, and they travel characteristically as individuals. Negroes lag in numbers behind the Mexican and Filipino groups, but it is possible that the Negroes may play an increasingly important role in the future.

TABLE 3.—Migrants "in Need of Manual Employment" Entering the State of California by Motor Vehicle via Border Stations, June 16, 1935–Mar. 31, 1938, Classified by Race and Family¹

Month	Total number of—		White		Colored		Mexican		Filipino		Other	
	Cars	Pas-sengers	Singles	In family	Sin-gles	In family	Sin-gles	In family	Sin-gles	In family	Sin-gles	In family
Total.....	63, 123	289, 299	39, 775	226, 663	1, 008	3, 155	1, 665	11, 221	3, 860	397	93	1, 462
1935 ²	13, 676	57, 017	9, 297	41, 702	181	520	451	3, 135	1, 122	161	72	376
1936.....	21, 378	97, 672	12, 729	77, 200	396	1, 045	533	3, 313	1, 642	151	13	650
1937.....	22, 167	104, 976	14, 232	83, 505	284	1, 192	521	3, 788	979	77	8	390
1938 ³	5, 902	29, 634	3, 517	24, 256	147	398	160	985	117	8	-----	46

¹ Data collected by border inspectors, Bureau of Plant Quarantine, California Department of Agriculture.

² June 16 to Dec. 31.

³ First quarter only.

Routes of Entry

Roughly, 6 of every 10 migrants entering California do so via highways crossing the State of Arizona. The routes of entry of the remainder are divided almost equally between Oregon and Nevada. The preponderant use of Arizona as a route of entry is explained by the geographic origin of the great majority of the migrants and to the existence of greater work opportunities while enroute through Texas, New Mexico, and Arizona (particularly the last-named) during the fall and winter months. To a lesser extent the volume of the flow across the Arizona border is also affected by seasonal exchanges of agricultural workers between California and Arizona.

Returning Californians weight materially the number of migrants entering the State via the Oregon border. For out-of-State migrants, Nevada is a more natural route than Oregon, and almost two such migrants come via Nevada for every one that enters via Oregon. In contrast, Californians returning across the Oregon border outnumber those returning through Nevada to such an extent as almost to wipe out the difference in out-of-State migrants and thus equalize the total flow of migrants across the borders of the two States.

Occupational Status of Refugees

The S. R. A. of Imperial County, Calif., has tabulated the previous occupational status of the heads of the 320 transient families who

requested relief between 1935 and the middle of 1937 and whose previous residence in another State was verified. The significance of this sample lies in the fact that Imperial County is the gateway through which a large part of the refugees enter California and the place where many of them find their first employment. However, since these families represent relief applicants only and are drawn from a single county, they obviously constitute a sample statistically inadequate to represent a migration to California which has numbered from ninety to one hundred thousand persons a year during the past 3 years. Generalizations based upon close numerical comparisons, therefore, should be avoided. Nevertheless, the data reveal the occupational character of the migration in its broad outlines.

Previous farm experience was reported by 175 family heads. Five had been farm owners, 43 had been tenants, 38 had been sharecroppers, and 106 had been farm laborers (table 4). A few reported having worked in more than one farm status, probably in most instances representing descending steps on the agricultural ladder.

The proportion of persons with farm experience, including experiences in grades above laborer, is markedly higher among those from Oklahoma, Texas, and Arkansas, the principal sources of the migration, than among the refugees as a whole. Thus, all 5 of the former owners were from these States, as were also 38 of the 43 tenants, 37 of the 38 sharecroppers, and 75 of the 106 farm laborers, although only two-thirds of the transients included in the sample came from this source.

It is a common story among former farm owners who have joined the migrants in Imperial County that they lost their equities, when the price of cotton fell after the war, and became tenants or sharecroppers; that they became laborers and later migrants when cotton prices fell again in the early thirties and when this depression was followed by drought and by mechanization of the cotton farms.

It is noteworthy that 141 transients from Oklahoma, Texas, and Arkansas reported previous farm experience, and only 94 reported nonfarm experience. In the entire sample 175 reported farm experience and 170 nonfarm experience, a more nearly even balance. But 25 of those who reported nonfarm experience had also worked on farms. Some farm laborers were included among the refugees from every State or group of States.

Those who reported a nonfarm occupation had worked in miscellaneous business and industrial activities. Many of these were from rural towns and small cities dependent on the trade of the countryside. Adverse conditions on the farms dislodged them, too.

TABLE 4.—Origin and Previous Occupations of 320 Transient Families Requesting Relief in Imperial County, Calif., 1935-37¹

[For explanation of numbers in Oklahoma, Texas, and Arkansas, see footnote 1, below]

State of origin	Total number of fam- ilies	Occupational experience					Non- farm
		Farm—					
		Owner	Tenant	Share- cropper	Laborer	Total farm ²	
All families.....	320	5	41	37	105	175	170
Drought States.....	274	5	40	37	96	169	116
Oklahoma.....	123	2	28	31	38	94	47
Eastern Oklahoma (No. 244).....	44	2	12	10	15	38	14
Southwest Oklahoma (No. 213 and 214A).....	31	—	7	11	10	25	9
Central Oklahoma (No. 242).....	15	—	2	1	3	6	10
Northeast Oklahoma (No. 238).....	12	—	2	5	3	9	6
Southern Oklahoma (No. 247).....	5	—	1	—	3	4	1
Other.....	16	—	4	4	4	12	7
Texas.....	52	3	5	1	19	26	31
Black Prairie (No. 252).....	14	1	—	—	5	6	9
Plains (No. 215 and 216B).....	8	—	1	1	5	5	6
Southwest Oklahoma-Texas (No. 213 and 214A).....	7	—	2	—	1	3	4
North Central Texas (No. 217).....	3	1	1	—	1	3	—
Lower Rio Grande (No. 224).....	3	—	—	—	2	2	1
Corpus Christi (No. 223).....	2	—	—	—	1	1	1
Other.....	15	1	1	0	4	6	10
Arizona.....	14	—	—	—	7	7	8
Arkansas.....	35	—	3	4	17	21	16
Black and Cache River Bottoms (No. 287 A-B).....	7	—	—	—	6	6	2
Other.....	28	—	3	4	11	15	14
Missouri.....	13	—	2	—	3	5	8
New Mexico.....	13	—	—	—	3	3	8
Colorado.....	6	—	1	—	2	3	3
Nebraska.....	5	—	1	1	3	3	2
Iowa.....	5	—	—	—	1	1	4
Others.....	8	—	—	—	3	3	5
Pacific States.....	8	—	—	—	3	3	6
Industrial States.....	17	—	—	—	1	1	16
Southern States.....	18	—	1	—	4	4	14
New England States.....	2	—	—	—	1	1	1
Puerto Rico.....	1	—	—	—	—	—	1

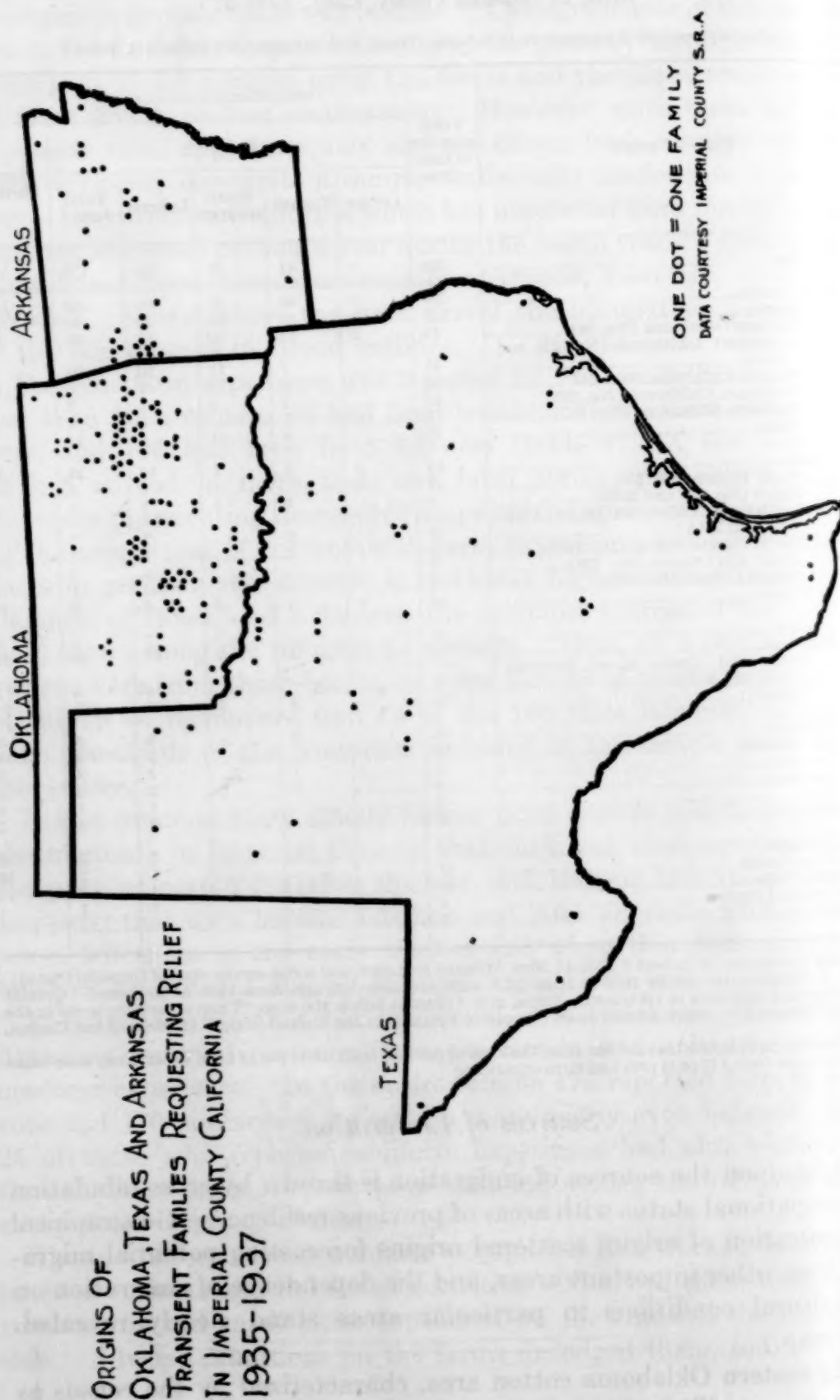
¹ Data by courtesy of Robert S. Elliott, Mrs. Mildred Standler, and social-service staff of Imperial County, S. R. A. Data cover period 1935 to June 1937, with occasional figures from 1934, as indicated. County groupings and numbers in Oklahoma, Texas, and Arkansas follow the map "Type of farming areas in the United States, 1930" which accompanies "Types of Farming in the United States" (Bureau of the Census, 1933).

² The total farm figure may be less than the sum of persons with all types of farm experience, since some reported more than 1 type of previous farm experience.

Sources of Emigration

Light upon the sources of emigration is thrown by cross-tabulation of occupational status with areas of previous residence. Geographical concentration of origin, scattered origins forecasting potential migration from other important areas, and the dependence of emigration on agricultural conditions in particular areas stand clearly revealed. (See map.)

The eastern Oklahoma cotton area, characterized by the census as "cotton, some livestock, dairy, self-sufficing," was the source of 44, or 14 percent, of the entire 320 transient families. Of these, 38 came



from farms; 2 had been owners, 12 tenants, 10 sharecroppers, and 15 farm laborers.

The Southwest Oklahoma-Texas cotton area was the origin of 38 of these families who requested relief in Imperial Valley. Of these, 28 were from farms. Nine had been tenants, 11 sharecroppers and 11 farm laborers. In both areas drought, depression, and recently power farming have been active factors in dislodgment of rural population.⁴

Among other areas of concentrated exodus are to be noted:

(1) Central Oklahoma (general farming, cotton, livestock, dairy, poultry) was the origin of 15 transient families of whom 2 were tenants, 1 a sharecropper, and 3 farm laborers.

(2) Northeast Oklahoma (general farming, livestock, dairy, poultry, self-sufficing) was the origin of 12 transients of whom 2 were tenants, 5 sharecroppers, and 3 farm laborers. Six emigrants reported nonfarm occupations. The entire eastern half of Oklahoma, together with adjoining counties in Kansas, Missouri, and northwestern Arkansas, have recently been characterized as "an outstanding problem area" of "low industrial stability, superimposed on submarginal agriculture."⁵

(3) Ouachita Mountains⁶ in western Arkansas and eastern Oklahoma where self-sufficing agriculture predominates, with some cotton and general farming, was the origin of 16 transient families, of which 2 were tenants, 2 sharecroppers, and 4 farm laborers (one had status as both sharecropper and laborer). Seven family heads previously engaged in occupations other than farming.

(4) Plains. From both high and low plains in west central Texas where drought and mechanization are dislodging cotton farmers, many emigrants have come to California. Of the eight transient families reported from this area, the heads of five were farm laborers, two of whom had also been tenant and sharecropper.

The areas of scattering are important as well as those of concentration, for they indicate that emigrant contacts have already been established which will facilitate prompt movement if unsettled conditions should spread in those areas. Among the more important areas from this viewpoint of potential emigration are:

(1) Black Wax Prairie, the richest of the western cotton lands. This is represented on the map by the thin line of dots stretching north and south through central Texas from the Red River to San Antonio. Of 14 transient families originating in this area, 9 had nonfarm occupations, 6 had been farm laborers, and 1 had been a farm owner. If use of tractors continues to spread and dislodge farm families in the Black Waxy, emigration from this area may develop volume.

(2) Lower Rio Grande Valley. From this area of intensive irrigated agriculture at the southern tip of Texas came three families, two of them farm laborers, one nonfarm.

(3) Corpus Christi. From this area came two families, one of them farm labor, the other nonfarm. The news sent back by emigrants to California could spread very fast and effectively in this great concentration point for migrant cotton pickers.

⁴ See Monthly Labor Review, March (p. 595) and April (p. 852) 1938.

⁵ Survey Graphic, June 1938, p. 350: Hard-Core Unemployment; the Challenge of Permanently Depressed Areas, by Pierce Williams.

⁶ Type of farming area No. 248. Counties: (Okla.) Atoka, Latimer, LeFlore, McCurtain; (Ark.) Logan, Sebastian, Yell.

PRISON LABOR IN 1936 ¹

By EDWARD P. SANFORD, *Bureau of Labor Statistics*

Summary

DURING the past half-century there has been a steady decrease in the proportion of prison inmates employed at productive labor. This is clearly shown by the series of studies made by the Bureau of Labor Statistics, beginning in 1885. During the period 1923 to 1936 the prison population in the institutions of 14 jurisdictions covered by the Bureau of Labor Statistics nearly doubled, but the number of prisoners assigned to productive labor increased only 21.7 percent. The value of goods produced by them decreased so markedly that the value of output in 1936 was only 43.4 percent of that in 1923.

Prison labor has been utilized under six systems, as follows:

Lease system.—No prisoners were found working under the lease system in 1923, in 1932, or in 1936, and it seems to have entirely disappeared from both State and Federal prisons. Under the lease system the State enters into a contract with the lessee, who agrees to receive the prisoners, paying the State a specific amount per man per day; generally also he feeds, clothes, houses, and guards the prisoners while employed. The State reserves the right to make rules for the care of the prisoners and to inspect their quarters and place of work.

Contract system.—Under this system an outside contractor contracts with the institution for the labor of the prisoners at a stipulated amount per capita per day. The State assumes no risk of loss, as the contractor furnishes his own raw materials and generally provides his own foremen, inspectors, machinery, and tools. The institution, however, houses, feeds, clothes, and guards the prisoners, and sometimes supervises their work.

Piece-price system.—This system is nearly the same as the contract system, the only difference being that under the piece-price system the contractor, instead of paying a stated amount per day, contracts with the institution for the labor of the prisoners at an agreed price per unit of output. The contractor generally furnishes the machinery and tools, and also provides for the supervision and inspection of the prisoners while working.

State-account system.—Under this system the institution carries on the productive enterprise and disposes of the product on the general market and in competition with the goods produced by free labor.

¹ Prepared under the direction of Herman B. Byer, chief of Division of Construction and Public Employment.

(4) Lonoke and White Counties in the rice, cotton and strawberry section of Arkansas already almost constitute an area of concentration. Failure of the berry crop because of drought and displacement of families by mechanization are factors. From these two counties came a transient sharecropper family, a farm labor family, one which had been both sharecropper and laborer, and two nonfarm families.

(5) The arrival in Imperial County of even a single destitute white tenant family from Mississippi County, Ark., stirs imagination of the stream which might some day flow westward from the rich and densely populated delta lands where the tenant farmers are organizing and tractors are cutting white and Negro families from the land.

The areas of scattering have been described in detail in order to suggest the variety and expanse of the sources which may develop importance. The Negro is already beginning to appear among the emigrants, although the overwhelming majority are native American whites. In the Imperial Valley group of transients there were only eight Negro families from Oklahoma and three Mexican families from Texas and Arizona. Some day the racial aspects of this migration to the West may assume greater importance, as they already do in the migration of farm families of the Southeast into Florida.

The necessity, therefore, of close observation of these areas and factors, of the collection of more extensive migration data, and of their analysis by status of the migrants and by counties of origin, should be obvious. Only in this way can the problems which arise when more emigrants join the flooded agricultural labor markets of the West be anticipated and met.

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the principal manufactures, in the 14 jurisdictions covered by the Bureau's studies, formed only 43.0 percent of the value of output, as compared with 82.5 percent in 1923. There was a pronounced decrease in the manufacture of such articles as brooms, hosiery, pants, shoes, furniture, and castings, formerly made largely under the contract system. Those articles of manufacture which have shown an increase are those, such as automobile license plates, that are manufactured for State use.

This movement away from contract production of goods competing with free labor has, however, confronted prison authorities with an increasingly grave problem in endeavoring to provide work for inmates and thus prevent idleness and its demoralizing effects.

Largely because of the attempt by prison officials to spread among the inmates the work available, the value of goods produced per prisoner productively employed was only about \$650 in 1936, as compared with \$900 in 1932, and \$1,850 in 1923. The average weekly working time per person also declined. Whereas, in 1932, the largest group of prisoners was working 48 hours per week, in 1936 the largest group had only a 44-hour week.

In addition to the so-called "productive" work provided, there are many tasks about the prison to which the inmates are assigned. It is estimated that, on the average, all these tasks—cleaning of yards and buildings, kitchen duties, etc.—require the services of only 15 to 25 percent of the total number of inmates. The studies showed, however, that in 1936 the maximum ratio was exceeded in 9 of the 13 States and in the District of Columbia, showing the effect of the authorities' attempt to provide some employment for all able to work.

Scope of Survey

The Bureau of Labor Statistics has made seven surveys of prison labor in the United States. These were made in 1885, 1895, 1905, 1914, 1923, 1932, and 1936.

The 1936 studies of prison labor conditions were made at the request of the Prison Industries Reorganization Administration. That agency was created by Executive order in September 1935 and was given the following duties:

(1) In cooperation with the proper authorities of the several States and their political subdivisions and the District of Columbia:

(a) To conduct surveys, studies and investigations of the industrial operations and allied activities carried on by the several penal and correctional institutions of the States * * * and the actual and potential markets for the products of such industrial operations and activities.

(b) To initiate, formulate and recommend for the approval of the President a program of projects with respect to replanning and reorganizing the existing prison industries systems and allied prison activities of the several States * * * to the end that the industrial operations and activities of such institutions may

The institution assumes all the business risks. If the business is one of manufacturing, the institution buys the raw material and sells the finished product in the same way as would be done by any manufacturing concern, except that it may retain part of the product for use in the prison. Thus, in the manufacture of shirts, part of the garments are used by the inmates of the institution and the remainder are sold in the open market under the State-account plan. The goods may be sold to individual customers or to a contractor who takes the entire output. Such a contractor must not be confused, however, with the contractor who hires work done by the prisoners. The institution under this system houses, feeds, clothes, and guards the prisoners, and directs and supervises their work.

In the past the State-account system often has been designated as the "public account" system.

State-use system.—Under this system, also, the institution carries on the business of production; use or sale of the goods produced is, however, limited to the institutions in which they were produced or to other State or Federal institutions. Such other State institutions may be under the control of the same or other States or of any of their subdivisions. The purpose of this restricted-sale principle is, of course, to make the prison product available to public institutions while avoiding direct competition with free-labor products. Under the State-use plan the institutions also house, feed, clothe, guard, direct, and supervise the prisoners.

Public works and ways system.—This system is the same in effect as the State-use system, the only difference being the character of the thing produced. The public works and ways system applies not to consumption goods, but to the construction and repair of prison buildings, other public buildings, roads, parks, and bridges, and to the work of flood control, reforestation, clearing land, etc.

The Bureau's studies have disclosed a definite increase in the use of those systems which keep prison-made goods out of the open market where they compete with the products of free labor. Whereas, in 1923, prisoners employed under the State-use and public works and ways systems formed only 29.2 percent of the total working at productive processes, in 1936 they formed 60.5 percent. There was little change in the relative use of the State-account system, but the proportion employed under the contract system had fallen from 33.4 percent to 6.1 percent.

▶ The coming into effect, in 1934, of the Hawes-Cooper Act of 1929, which divested prison-made goods of their interstate character and thus made them subject to restrictive State laws, hastened considerably the trend toward the State-use and public-works systems.

When the contract and piece-price systems flourished, manufactured articles formed the largest part of prison output. By 1936, however,

be so reorganized as to relieve private industry and labor of competition between the products of private industry with the products of such institutions and to eliminate idleness and to provide an adequate and humane system of rehabilitation for the inmates of such institutions.

(2) To recommend for the approval of the President loans or grants or both to the several States * * * necessary to accomplish the purpose of this order and to administer and supervise the program of projects approved by the President.

Thus far, studies undertaken by the Bureau at the request of the Prison Industries Reorganization Administration have been completed in 17 States and the District of Columbia.

As the investigation was undertaken only in those States whose governors requested it, selection of a sample for the study was not possible. While work has been completed in 17 States and the District of Columbia, in 3 of these States data covered periods other than the year 1936. For that reason this article will deal with institutions in only 13 States and the District of Columbia. The article will show the change of the employment situation by comparing data gathered in the same institutions in 1923, 1932, and 1936.²

The population of State and Federal prisons studied in 1932 was 158,947. Those institutions covered in 1936 contained 32,148 or slightly more than 20 percent of this number. The 1936 group included large, medium, and small prisons in many parts of the country, and both farm and industrial types of prisons, but it cannot be considered a truly representative sample. No prisons in the heavily industrial section of the New England and Middle Atlantic regions were studied. Only a Nation-wide survey of all penal institutions, such as was made by the Bureau in its earlier studies, can give an exact picture of the employment situation in prisons. However, the results of this limited survey give an accurate report of conditions in the institutions studied, and when compared with data gathered in the same States and the District of Columbia in 1923 and 1932, the trend in these institutions is very clear and a fair indication of the country-wide trend is obtained.

With the exception of the Newcastle County Workhouse in Delaware and the District of Columbia Workhouse, all institutions studied

² The States and institutions are:

Arkansas.—State Farm for Women (1932); State Penitentiary.

California.—State Prison, Folsom; State Prison, San Quentin.

Delaware.—Newcastle County Workhouse.

District of Columbia.—District Reformatory; District Workhouse.

Kentucky.—State Penitentiary; State Reformatory.

Maryland.—House of Correction; State Penal Farm (1932-36); State Penitentiary.

New Mexico.—State Penitentiary.

Oklahoma.—State Penitentiary; State Reformatory.

Oregon.—State Penitentiary.

Tennessee.—Brushy Mountain Penitentiary; State Penitentiary.

Utah.—State Prison.

Vermont.—State Prison and House of Correction for Men; State Prison and House of Correction for Women (1923-32).

West Virginia.—State Penitentiary.

Wyoming.—State Industrial Institution (1923-32); State Penitentiary.

were ordinarily for long-term prisoners sentenced for felony. The period covered by the study was in most cases the fiscal year ending June 30, 1936.

Proportion of Prisoners Employed at Productive Labor

The progressive decrease in the proportion of prisoners productively employed is strikingly revealed in table 1. In the prisons studied the proportion of prisoners productively employed in the 9 years between 1923 and 1932 dropped from 70.5 to 56.9 percent, or at the rate of 1.5 percent a year. In the 4 years between 1932 and 1936 the proportion fell from 56.9 to 44.6 percent, or at the rate of 3.1 percent a year.

This table also indicates a pronounced trend toward the use of the two systems of production which keep prison-made goods out of the competitive market. Prisoners employed under the State-use and public works and ways systems in 1923 formed 29.2 percent of the total; in 1932, 39.1 percent; and in 1936, 60.5 percent. The proportion of prisoners employed under the State-account system remained practically unchanged. Both the contract system and the piece-price system showed a sharp reduction in 1936 as compared with 1932. No prisoners were employed under the lease system in the 14 jurisdictions covered in the last 3 specified years.

TABLE 1.—*Percent of Prisoners Employed at Productive Labor Under Different Systems in Specified Years*

System	All State and Federal institutions				State institutions in 13 States and institutions in the District of Columbia		
	1885	1895	1905	1914	1923	1932	1936
All systems.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
State-use system.....			18.0	22.0	21.2	24.7	38.8
Public works and ways system.....	26.0	33.0	18.0	11.0	8.0	14.4	21.7
State-account system.....			21.0	31.0	22.9	20.1	21.5
Piece-price system.....	8.0	14.0	8.0	6.0	14.5	21.1	11.9
Contract system.....	40.0	34.0	36.0	26.0	33.4	19.7	6.1
Lease system.....	26.0	19.0	9.0	4.0			
Percent prisoners employed at productive labor formed of all prisoners.....	75.0	72.0	65.0	(?)	70.5	56.9	44.6

¹ No separation made of State-account, State-use, and public works and ways systems in this year.

² Not reported.

The average number of prisoners employed at productive labor and the value of commodities and services produced under the various systems are shown in table 2.³ The shift in the relative use of the

³ Where the value of prison-made goods is treated in this article no attempt has been made to account for the changes in the value of the dollar between 1923 and 1936, nor have price changes been taken into account. The decreases in dollar value are therefore sharper than the decreases in real value.

different productive systems is indicated both in the number of prisoners employed under each system and in the value of commodities produced. Goods produced under the piece-price and contract systems in 1923 accounted for 47.9 percent of all prisoners productively employed and for 81.1 percent of the value of all goods and services produced. In 1932 these systems utilized 40.8 percent of all prisoners productively employed and resulted in goods to the value of 56.8 percent of all goods produced. In 1936, 18.0 percent of all prisoners productively employed worked under these systems, producing goods to the value of 27.4 percent of all goods produced.

On the other hand commodities and services produced under State-use, public works and ways, and State-account systems in 1923 accounted for 52.1 percent of all prisoners productively employed and for 18.9 percent of the value of all goods produced. In 1932 the corresponding ratios were 59.2 and 43.2 percent, respectively. In 1936, 82.0 percent of all prisoners productively employed worked under these three systems and produced 72.6 percent by value of all output.

TABLE 2.—*Employment and Production Under Specified Systems of Prison Labor, by Years*¹

PRISONERS PRODUCTIVELY EMPLOYED						
System	Average number			Percent		
	1923	1932	1936	1923	1932	1936
All systems.....	11, 779	16, 875	14, 337	100. 0	100. 0	100. 0
State-use system.....	2, 500	4, 175	5, 558	21. 2	24. 7	38. 8
Public works and ways system.....	948	2, 433	3, 113	8. 0	14. 4	21. 7
State-account system.....	2, 700	3, 387	3, 089	22. 9	20. 1	21. 5
Piece-price system.....	1, 703	3, 556	1, 703	14. 5	21. 1	11. 9
Contract system.....	3, 928	3, 324	874	33. 4	19. 7	6. 1
COMMODITIES PRODUCED						
System	Value			Percent		
	1923	1932	1936	1923	1932	1936
All systems.....	\$21, 750, 622	\$15, 111, 096	\$9, 438, 347	100. 0	100. 0	100. 0
State-use system.....	1, 481, 862	1, 584, 829	2, 157, 226	6. 8	10. 5	22. 8
Public works and ways system.....	1, 280, 100	3, 874, 252	3, 257, 285	5. 9	25. 6	34. 5
State-account system.....	1, 342, 778	1, 068, 568	1, 440, 566	6. 2	7. 1	15. 3
Piece-price system.....	5, 141, 882	3, 711, 757	1, 765, 543	23. 6	24. 6	18. 7
Contract system.....	12, 504, 000	4, 871, 690	817, 727	57. 5	32. 2	8. 7

¹ Data relate to State institutions in 13 States and institutions in the District of Columbia.

The percentages of change in prisoners employed and goods produced under each system in the three years, 1923, 1932, and 1936, are shown in table 3.

TABLE 3.—Changes in Employment and Production Under Specified Systems of Prison Labor from 1923 and 1932-36 ¹

System	Prisoners productively employed, 1936			Value of commodities produced, 1936		
	Average number	Percent of change from—		Value	Percent of change from—	
		1932	1923		1932	1923
All systems.....	14, 337	-15. 0	+21. 7	\$9, 438, 347	-37. 5	-56. 6
State-use system.....	5, 558	+33. 1	+122. 3	2, 157, 226	+36. 1	+45. 6
Public works and ways system.....	3, 113	+27. 9	+228. 4	3, 257, 285	-15. 9	+154. 5
State-account system.....	3, 089	-8. 8	+14. 4	1, 440, 566	+34. 8	+7. 3
Piece-price system.....	1, 703	-52. 1	-----	1, 765, 543	-52. 4	-65. 7
Contract system.....	874	-73. 7	-77. 7	817, 727	-83. 2	-93. 5

¹ Data relate to State institutions in 13 States and institutions in the District of Columbia.

Commodities Produced

In 1932, 485 commodities and services were produced in the prisons studied. The goods produced, grouped into principal commodity classifications, are shown in table 4. This tabulation reveals the marked decline in the manufactured articles that, when the contract and piece-price systems were prevalent, comprised the largest part of prison-made goods. In 1923 in institutions in the 14 jurisdictions covered by this report the value of such manufactures—brooms, brushes and mops, clothing, furniture and furnishings, metal products, printing and binding, and textiles and textile products—was \$17,-942,685, or 82.5 percent of all goods produced; in 1932 the value of the same manufactures was \$9,677,099, or 64 percent of the value of all goods produced; and in 1936 the figure was \$4,054,672, or 43 percent of the value of all goods produced.⁴ The growing importance of the manufacture of stamped and enameled automobile license plates, because it is a logical State-use industry, is indicated by the fact that in 1936 several of the institutions covered produced this commodity—Arkansas 228,200 pairs, District of Columbia 200,317 pairs, Kentucky 346,651 pairs, Maryland 706,828 pairs, New Mexico 216,000 pairs, Oklahoma 651,240 pairs, and Vermont 109,000 pairs—a total of 2,458,236 pairs valued at \$169,489.

The goods or services showing increases in production were those that were disposed of for State use or were under public works and ways. Comparing the 1923 values, farm products showed a decline of 7.1 percent in 1932 and an increase of 20.7 percent in 1936; construction showed an increase of 182.8 percent in 1932 and 119.6 percent in 1936; printing and binding showed an increase of 322.9 percent in 1932 and 445.7 percent in 1936.

⁴ In 1923 the value of these groups of commodities produced in all State and Federal prisons was \$46,306,431, or 60.9 percent of the value of all goods produced; in 1932 it was \$38,823, 514, or 51.5 percent of the value of all goods produced.

TABLE 4.—*Employment on Production of Specified Commodities, and Value of Output, 1923, 1932, and 1936*¹

Commodity or service	Average number of prisoners productively employed			Value of commodities produced		
	1923	1932	1936	1923	1932	1936
All commodities.....	11, 779	16, 875	14, 337	\$21, 750, 622	\$15, 111, 096	\$9, 438, 347
Agricultural implements.....	12		10	861		2, 048
Bakery products, commercial.....		1	4		261	24, 074
Baskets.....	33	8		16, 439	7, 164	
Brooms, brushes, and mops.....	231	299	150	1, 099, 292	601, 556	230, 980
Clay, cement, and stone products.....	1, 001	1, 683	1, 517	488, 893	185, 396	446, 251
Clothing.....	4, 761	6, 811	2, 957	14, 806, 608	7, 644, 783	2, 318, 665
Coal mining.....	279	628	744	286, 406	171, 913	187, 344
Construction.....	1, 021	2, 375	2, 788	1, 366, 594	3, 864, 052	3, 001, 281
Farm, garden, and dairy.....	1, 885	2, 374	2, 741	970, 137	901, 306	1, 170, 598
Furniture and furnishings.....	596	578	587	673, 384	443, 203	313, 147
Harness, pieces.....	93	50	79	213, 210	123, 318	236, 750
Harness, sets.....	193	10	23	225, 940	26, 620	67, 963
Land development.....		58	214		10, 200	52, 095
Laundry, commercial.....	17	89	123	5, 679	46, 873	59, 208
Lumber and timber products.....	10	1	206	6, 270	965	48, 747
Metal products.....	230	383	665	660, 061	405, 553	425, 757
Printing and binding.....	23	109	130	21, 139	89, 401	115, 355
Repair and shop work.....	186	22	10	120, 522	12, 178	8, 356
Soap and soap powder.....			4			7, 079
Textiles and textile products.....	1, 097	1, 303	1, 310	682, 201	492, 603	650, 768
Toys.....		2	5		149	(²)
Whips.....	83	31	26	63, 200	43, 782	27, 917
Other manufactured products.....	23	46	13	42, 125	33, 200	23, 725
Miscellaneous labor only.....	5	14	31	1, 661	6, 620	20, 239

¹ Data relate to State institutions in 13 States, and institutions in the District of Columbia.² Evaluation impracticable.

The relative production of textile products was practically unchanged, largely because of the continued activity of a jute mill in the California State Prison at San Quentin.

The total number of men productively employed showed a sharp increase in 1932 over 1923, but a decrease in 1936 below the figure for 1932. However, the value of all goods produced in prison, as well as the value of the selected commodities, showed a progressive and marked decrease. For all commodities this decrease in value was from roughly 22 million dollars in 1923 to 15 million in 1932 and to 9½ million in 1936. The value of goods produced per inmate productively employed was \$1,847 in 1923; \$895 in 1932; and \$658 in 1936; a contributing factor was the lowered unit production per man resulting from the slowing up of production in order to give some productive employment to as many inmates as possible.

The number of inmates employed in making these commodities in the institutions studied, and the value of goods produced in 1923, 1932, and 1936 are shown in table 5, with the principal manufactured commodity groups subdivided into the more important articles. The most striking fact in the table is the sharp decrease in the total output of these prison-made goods—46.1 percent from 1923 to 1932, and 77.4 percent from 1923 to 1936.

In 1932 and earlier years certain commodities were made largely by contractors. The most important of these articles were brooms, hosiery, pants, shirts, shoes, various kinds of furniture, and castings.

As might be expected, after the effective date of the Hawes-Cooper Act in 1934, the production of all these commodities in the prisons studied fell off sharply. By 1936 the results of this restrictive law were plainly apparent. Compared with the value of brooms made in 1923, the 1932 production declined 45.4 percent and in 1936, 79 percent; the value of hosiery produced in 1932 declined 75.1 percent and in 1936, 58.9 percent; the value of pants produced in 1932 declined 5.7 percent and in 1936, 61.7 percent; the value of shirts produced in 1932 declined 51.7 percent and in 1936, 90.7 percent; the value of shoes produced in 1932 declined 92.0 percent and in 1936, 98.2 percent; the value of furniture produced in 1932 declined 34.2 percent and in 1936, 53.5 percent; and the value of castings produced in 1932 declined 62.6 percent and in 1936, 71.3 percent. All goods made by contract were sold in the open market.

TABLE 5.—*Employment on Production of Selected Commodities, and Value of Output in 1923, 1932, and 1936, by Commodity*¹

Commodities	Average number of prisoners productively employed			Value of commodities produced		
	1923	1932	1936	1923	1932	1936
Total.....	6, 938	9, 483	5, 799	\$17, 942, 685	\$9, 677, 099	\$4, 054, 672
Brooms, brushes, and mops.....	231	299	150	1, 099, 292	601, 556	230, 980
Brooms.....	231	296	150	1, 099, 292	600, 717	230, 980
Brushes.....		3			839	
Clothing.....	4, 761	6, 811	2, 957	14, 806, 608	7, 644, 783	2, 318, 665
Aprons.....	252	4	5	329, 365	1, 541	4, 104
Childrens' play suits.....		121			119, 159	17, 639
Coats.....		31	65		38, 389	34, 080
Dresses.....		9	4		1, 137	1, 418
Hats and caps.....		13	19		6, 879	8, 483
Hosiery.....	256	120	321	374, 606	93, 164	153, 797
Overalls.....	66	34	95	33, 470	17, 369	69, 358
Pajamas and nightgowns.....		452	3		796, 121	634
Pants.....	1, 072	2, 478	1, 185	3, 064, 775	2, 889, 253	1, 172, 556
Shirts.....	2, 055	2, 918	662	6, 654, 072	3, 211, 994	619, 724
Shoes, new.....	941	350	203	4, 234, 899	337, 853	78, 002
Shoes, repaired.....	49	55	80	69, 803	37, 393	46, 812
Suits.....		176	176		82, 252	72, 287
Underwear.....	10	8	42	1, 261	5, 156	17, 639
Other clothing.....	60	42	97	44, 357	7, 123	22, 132
Furniture and furnishings.....	596	578	587	673, 384	443, 203	313, 147
Beds, bureaus, desks, etc.....	10	205	188	1, 235	35, 378	32, 425
Chairs, wood.....	213	280	286	594, 920	330, 811	210, 463
Other furniture and furnishings.....	373	93	113	77, 229	77, 014	70, 259
Metal products.....	230	383	665	660, 061	405, 553	425, 757
Auto license tags.....	29	82	93	64, 638	166, 670	169, 488
Castings.....	184	255	407	564, 178	211, 225	161, 847
Tinware.....		9	27		444	4, 752
Other metal products.....	17	37	138	31, 245	27, 214	89, 670
Printing and binding.....	23	109	130	21, 139	89, 401	115, 355
Books.....		6	1		448	168
Envelopes.....		4	7		4, 157	6, 642
Letterheads.....		7	8		5, 887	5, 288
Other printing.....	23	92	114	21, 139	78, 909	103, 257
Textiles and textile products.....	1, 097	1, 303	1, 310	682, 201	492, 603	650, 768
Bags.....	788	1, 041	1, 055	350, 930	343, 072	420, 979
Binder twine.....	90	98	116	192, 873	70, 754	137, 707
Sheets.....		11	24		9, 293	15, 096
Wool and woolens.....			30			17, 366
Other textile products.....	219	153	85	138, 398	69, 484	59, 620

¹ Data relate to State institutions in 13 States, and institutions in the District of Columbia.

The average number and percent of prisoners productively employed who were engaged in the principal activities of prison industry are indicated in table 6. Increased numbers of prisoners above the 1923 figures were employed in making clay, cement, and stone products, in construction, in farming, in making metal products, and in printing and binding. In the other principal prison industries the relative percentage of prisoners employed remained practically stationary or declined.

TABLE 6.—Average Number and Percent of Prisoners Productively Employed in 1923, 1932, and 1936, by Selected Commodities ¹

Commodity	Average number			Percent		
	1923	1932	1936	1923	1932	1936
All commodities.....	11, 779	16, 875	14, 337	100. 0	100. 0	100. 0
Brooms, brushes, and mops.....	231	299	150	2. 0	1. 7	1. 1
Clay, cement, and stone products.....	1, 001	1, 683	1, 517	8. 5	10. 0	10. 6
Clothing.....	4, 761	6, 811	2, 957	40. 4	40. 4	20. 6
Construction.....	1, 021	2, 375	2, 788	8. 7	14. 1	19. 5
Farm, garden, and dairy.....	1, 885	2, 374	2, 741	16. 0	14. 1	19. 1
Furniture and furnishings.....	596	578	587	5. 1	3. 4	4. 1
Metal products.....	230	383	665	1. 9	2. 3	4. 6
Printing and binding.....	23	109	130	. 2	. 6	. 9
Textiles and textile products.....	1, 097	1, 303	1, 310	9. 3	7. 7	9. 1
Other commodities.....	934	960	1, 492	7. 9	5. 7	10. 4

¹ Data relate to State institutions in 13 States and institutions in the District of Columbia.

The number of prisoners and of those on productive labor, and the value of their output, by States, in the 3 years are shown in table 7.

TABLE 7.—Average Number of Total Prisoners and of Those Productively Employed and Value of Commodities Produced by States and Years

State	Average			Number of—			Value of commodities produced		
	Total prisoners			Prisoners productively employed					
	1923	1932	1936	1923	1932	1936	1923	1932	1936
All States covered.....	16, 704	29, 641	32, 148	11, 779	16, 875	14, 337	\$21, 750, 622	\$15, 111, 096	\$9, 438, 347
Arkansas.....	1, 295	1, 425	1, 821	1, 053	867	1, 333	300, 623	232, 409	440, 899
California.....	3, 841	7, 675	8, 392	2, 541	4, 394	4, 721	1, 463, 332	2, 651, 567	2, 587, 996
Delaware.....	350	527	511	245	312	225	431, 661	226, 018	184, 388
District of Columbia.....	539	1, 580	2, 383	220	676	1, 176	297, 479	712, 020	597, 349
Kentucky.....	2, 043	3, 575	3, 938	1, 695	2, 407	403	6, 961, 220	3, 115, 445	680, 947
Maryland.....	1, 495	2, 586	2, 814	1, 212	1, 341	697	2, 771, 143	2, 099, 867	827, 193
New Mexico.....	399	560	609	193	263	229	37, 175	59, 217	122, 297
Oklahoma.....	2, 051	4, 117	4, 384	1, 271	2, 064	2, 137	1, 940, 751	979, 592	1, 308, 222
Oregon.....	424	851	911	163	352	278	129, 402	265, 301	204, 792
Tennessee.....	1, 691	2, 941	3, 126	1, 359	2, 063	2, 064	2, 120, 055	1, 609, 161	1, 111, 798
Utah.....	188	312	323	39	37	26	86, 847	16, 573	19, 422
Vermont.....	344	430	329	243	266	88	615, 280	291, 816	66, 013
West Virginia.....	1, 645	2, 642	2, 268	1, 281	1, 555	873	2, 879, 329	2, 592, 545	1, 210, 124
Wyoming.....	399	420	339	264	278	87	1, 716, 325	259, 565	76, 963

In the institutions studied, the prison population nearly doubled during the 13-year period but the prisoners productively employed

increased only 21.7 percent and the value of goods and services produced amounted to 43.4 cents in 1936 for every dollar in 1923 (table 8). In two of the smaller institutions, the State prisons of Vermont and Wyoming, the prison population decreased slightly during the 13 years, but the prisoners productively employed and the value of goods produced showed marked decreases. The problems created by decreased production and resulting increased idleness can best be visualized by the trends in Kentucky, Maryland, Utah, Vermont, West Virginia, and Wyoming. In these States the increase in prison population ranged from 37.9 percent in West Virginia to 92.8 percent in Kentucky. The decrease in prisoners productively employed ranged from 76.2 percent in Kentucky to 31.9 percent in West Virginia. The value of goods produced decreased in most of the States shown. The largest decrease occurred in Wyoming, where goods and services produced amounted to only 4.5 cents in 1936 for every dollar in 1923. Increases in the value of goods produced were observed in Arkansas, California, New Mexico, Oregon,¹ and the District of Columbia.

TABLE 8.—*Indexes of Population, Prisoners Productively Employed, and Value of Output in 1936*
[1923=100.0]

State	Average number of prisoners	Average number of prisoners productively employed	Value of output	State	Average number of prisoners	Average number of prisoners productively employed	Value of output
Total.....	192.5	121.7	43.4	New Mexico.....	152.6	118.7	329.0
Arkansas.....	140.6	126.6	146.7	Oklahoma.....	213.7	168.1	67.4
California.....	218.5	185.8	176.9	Oregon.....	214.9	170.6	158.3
Delaware.....	146.0	91.8	42.9	Tennessee.....	184.9	151.9	52.4
District of Columbia.....	442.1	534.5	200.8	Utah.....	171.8	66.7	22.4
Kentucky.....	192.8	23.8	9.8	Vermont.....	95.6	36.2	10.7
Maryland.....	188.2	57.5	29.9	West Virginia.....	137.9	68.1	42.0
				Wyoming.....	85.0	33.0	4.5

In Vermont and Wyoming there were fewer prisoners confined in 1936 than in 1923. In the remaining 11 States and the District of Columbia the increase in population ranged from 38 percent in West Virginia to over 342 percent in the District of Columbia. In some prison systems there was an increase in the gross number of inmates productively employed, but in these cases there was a relatively greater increase in the prison population. In Oklahoma, prison population increased over 113 percent during the period, but prisoners productively employed increased only 68 percent. The District of Columbia offers the only exception to the trend; inmates productively employed increased in greater proportion than the growth of prison population; this situation is explained by the Prison Industries Reorganization Administration in their report on The Prison Problem in the District of Columbia 1938 (p. 61), as follows: "But the farming and industrial operations (at Lorton and Occoquan) are not nearly extensive enough

to employ all the able-bodied men and women present, and the slack has to be taken up by overloading the work details and assigning two and three persons to jobs which could be done satisfactorily by one."

Assignment of Prison Inmates

The average number of prisoners confined, productively employed, sick and idle, and the number assigned to prison duties are indicated in table 9. Of greatest significance is the increase in idleness in the institutions, ranging from 2.5 percent in 1923 to 21.3 percent in 1936.

TABLE 9.—Number and Employment and Other Status of Prisoners; 1923, 1932, and 1936, by States

State	Year	Average number of prisoners during year				
		Total	Employed at productive labor	Engaged in prison duties	Sick	Idle
All institutions covered:						
Number.....	1923	16,704	11,779	3,923	580	422
	1932	29,641	16,875	9,394	1,202	2,170
	1936	32,148	14,337	10,013	936	6,862
Percent.....	1923	100.0	70.5	23.5	3.5	2.5
	1932	100.0	56.9	31.7	4.1	7.3
	1936	100.0	44.6	31.2	2.9	21.3
Arkansas.....	1923	1,295	1,053	153	89	-----
	1932	1,425	867	493	65	-----
	1936	1,821	1,333	436	47	5
California.....	1923	3,841	2,541	1,096	127	77
	1932	7,675	4,394	2,967	227	87
	1936	8,392	4,721	3,210	212	249
Delaware.....	1923	350	245	93	6	6
	1932	527	312	190	10	15
	1936	511	225	226	9	51
District of Columbia.....	1923	539	220	303	14	2
	1932	1,580	676	823	81	-----
	1936	2,383	1,176	952	122	133
Kentucky.....	1923	2,043	1,695	288	51	9
	1932	3,575	2,407	608	109	451
	1936	3,938	403	707	50	2,778
Maryland.....	1923	1,495	1,212	265	12	6
	1932	2,586	1,341	374	167	704
	1936	2,814	697	468	127	1,522
New Mexico.....	1923	399	193	168	20	18
	1932	560	263	218	30	49
	1936	609	229	352	13	15
Oklahoma.....	1923	2,051	1,271	702	53	25
	1932	4,117	2,064	1,981	72	-----
	1936	4,384	2,137	1,776	65	406
Oregon.....	1923	424	163	182	7	72
	1932	851	352	436	38	25
	1936	911	278	434	16	183
Tennessee.....	1923	1,691	1,359	176	156	-----
	1932	2,941	2,063	604	225	49
	1936	3,126	2,064	829	203	30
Utah.....	1923	188	39	36	2	111
	1932	312	37	79	20	176
	1936	323	26	97	2	198
Vermont.....	1923	344	243	86	3	12
	1932	430	266	134	4	26
	1936	329	88	92	2	147
West Virginia.....	1923	1,645	1,281	247	34	83
	1932	2,642	1,555	388	139	560
	1936	2,268	873	348	58	989
Wyoming.....	1923	399	264	128	6	1
	1932	420	278	99	15	28
	1936	339	87	86	10	156

TABLE 10.—Average Number of Prisoners Productively Employed under Specified Systems, by States and Year

State	Year	Total	State use	Public works and ways	State account	Piece price	Contract
All institutions covered:							
Number.....	1923	11,779	2,500	948	2,700	1,703	3,928
	1932	16,875	4,175	2,433	3,387	3,556	3,324
	1936	14,337	5,558	3,113	3,089	1,703	874
Percent.....	1923	100.0	21.2	8.0	22.9	14.5	33.4
	1932	100.0	24.7	14.4	20.1	21.1	19.7
	1936	100.0	38.8	21.7	21.5	11.9	6.1
Arkansas.....	1923	1,053	156	-----	897	-----	-----
	1932	867	142	-----	725	-----	-----
	1936	1,333	707	33	593	-----	-----
California.....	1923	2,541	1,095	613	833	-----	-----
	1932	4,394	1,850	1,401	1,143	-----	-----
	1936	4,721	2,124	1,498	1,099	-----	-----
Delaware.....	1923	245	28	-----	12	-----	205
	1932	312	56	38	12	206	-----
	1936	225	66	4	1	154	-----
District of Columbia.....	1923	220	156	64	-----	-----	-----
	1932	676	476	200	-----	-----	-----
	1936	1,176	739	437	-----	-----	-----
Kentucky.....	1923	1,695	155	-----	2	-----	1,538
	1932	2,407	126	-----	1	1,185	1,095
	1936	403	90	-----	211	-----	102
Maryland.....	1923	1,212	760	9	6	-----	1,137
	1932	1,341	182	78	22	210	849
	1936	697	235	99	8	343	12
New Mexico.....	1923	193	-----	13	180	-----	-----
	1932	263	106	32	125	-----	-----
	1936	229	71	17	141	-----	-----
Oklahoma.....	1923	1,271	340	82	419	430	-----
	1932	2,064	371	20	723	950	-----
	1936	2,137	648	500	349	555	25
Oregon.....	1923	163	79	-----	84	-----	-----
	1932	352	143	30	179	-----	-----
	1936	278	127	4	147	-----	-----
Tennessee.....	1923	1,359	254	-----	220	885	-----
	1932	2,063	443	-----	377	-----	1,243
	1936	2,064	420	60	527	421	626
Utah.....	1923	39	29	7	3	-----	-----
	1932	37	35	-----	2	-----	-----
	1936	26	25	-----	1	-----	-----
Vermont.....	1923	243	10	30	27	176	-----
	1932	266	50	-----	41	175	-----
	1936	88	88	-----	-----	-----	-----
West Virginia.....	1923	1,281	86	130	17	-----	1,048
	1932	1,555	131	629	-----	658	137
	1936	873	142	391	1	230	109
Wyoming.....	1923	264	52	-----	-----	212	-----
	1932	278	64	5	37	172	-----
	1936	87	66	10	11	-----	-----

The shift in prisoners productively employed from one system of production to another is shown in table 10. It has been pointed out that the trend of employment in prisons during the 13 years covered has been away from the piece-price and contract systems towards the State-use and public works and ways plans. It is the opinion of students of the subject that the State-account system will ultimately disappear and be replaced by the State-use system, but this trend was not observed in the institutions studied. Under the State-account system 22.9 percent of all productively employed prisoners were working in 1923, 20.1 percent in 1932, and 21.5 percent in 1936—

relatively little change during the 13-year period. The number of prisoners working under the State-use system increased between 1923 and 1936 in all States except Kentucky and Utah, and this was also true of prisoners working under the public works and ways system, except in Utah and Vermont. The piece-price system was operating in 8 States prior to 1936 and in 5 States in that year; in 1923, 1,703 or 14.5 percent of all prisoners productively employed worked under this system; in 1932, 3,556 or 21.1 percent; and in 1936, 1,703 or 11.9 percent. The contract system was operating in 5 of the States covered prior to 1936 and in 5 States in that year, but there was a marked decrease in the number of prisoners working under this system. In 1923, 3,928 prisoners or 33.4 percent of all prisoners productively employed were working under this system; in 1932, 3,324 or 19.7 percent; and in 1936, 874 or 6.1 percent.

Full-time Hours of Labor of Prisoners Productively Employed

In the three surveys of prison labor with which this report deals, data were gathered concerning the full working time of prisoners productively employed. In 1923 this information was reported on the basis of a workday. In 1932 and 1936 it was reported on the basis of a workweek. The data are therefore comparable for only the two later surveys (table 11).

A full-time 48-hour week was worked by the largest group of prisoners productively employed in 1932 (24.5 percent). In 1936 the largest group (31.7 percent) had a full-time workweek of 44 hours. In 1932, 26 percent of prisoners employed at productive labor had a full-time workweek of less than 44 hours and for 50.5 percent the full-time workweek was more than 44 hours. In 1936 this situation had been practically reversed; for 45.7 percent of the prisoners the full-time workweek was less than 44 hours and for 22.6 percent it was more than 44 hours. In an apparent effort to spread work over the largest number of prisoners possible, not only did idleness in prisons increase in 1936 but the regular full-time hours of labor were shortened. The long week of 60 hours or more in 1936 was worked by farm laborers in Arkansas and by farm laborers and miners in Tennessee.

TABLE 11.—Classified Weekly Working Hours of Prisoners Productively Employed, in 1932 and 1936¹

State, and full-time weekly hours	Prisoners productively employed during—			
	1932		1936	
	Average number	Percent	Average number	Percent
All jurisdictions covered.....	16,875	100.0	14,337	100.0
Under 24 hours.....	1,025	6.1	2	(²) 2.9
24 and under 32 hours.....	440	2.6	412	2.9
32 and under 36 hours.....	1,152	6.8	2,797	19.5
36 and under 40 hours.....	341	2.0	1,440	10.1
40 and under 44 hours.....	1,429	8.5	1,884	13.2
44 hours.....	3,966	23.5	4,539	31.7
Over 44 and under 48 hours.....	179	1.1	118	.8
48 hours.....	4,135	24.5	388	2.7
Over 48 and under 54 hours.....	174	1.0	278	1.9
54 hours.....	2,826	16.8	233	1.6
Over 54 and under 60 hours.....	36	.2	46	.3
60 hours.....	1,172	6.9	1,352	9.4
Over 60 hours.....			848	5.9
Arkansas.....	867	100.0	1,333	100.0
44 hours.....			13	1.0
48 hours.....	16	1.8		
Over 48 and under 54 hours.....			8	.2
60 hours.....	851	98.2	1,293	97.0
Over 60 hours.....			24	1.8
California.....	4,394	100.0	4,721	100.0
Under 24 hours.....	835	19.0		
24 and under 32 hours.....	426	9.7	186	3.9
32 and under 36 hours.....	1,152	26.2	2,789	59.1
36 and under 40 hours.....	321	7.3	635	13.5
40 and under 44 hours.....	1,044	23.8		
44 hours.....	20	.5	1,053	22.3
48 hours.....	581	13.2		
Over 54 and under 60 hours.....			43	.9
60 hours.....	15	.3		
Over 60 hours.....			15	.3
Delaware.....	312	100.0	225	100.0
24 and under 32 hours.....	11	3.5		
40 and under 44 hours.....			175	77.8
44 hours.....	206	66.0	50	22.2
60 hours.....	95	30.5		
District of Columbia.....	676	100.0	1,176	100.0
36 and under 40 hours.....	15	2.2		
40 and under 44 hours.....	276	40.8		
44 hours.....	385	57.0	1,176	100.0
Kentucky.....	2,407	100.0	403	100.0
36 and under 40 hours.....			124	30.8
48 hours.....	2,402	99.8	279	69.2
Over 54 and under 60 hours.....	5	.2		
Maryland.....	1,341	100.0	697	100.0
36 and under 40 hours.....			225	32.3
40 and under 44 hours.....			178	25.5
44 hours.....	1,145	85.4	20	2.9
48 hours.....			6	.9
Over 48 and under 54 hours.....	60	4.5	157	22.5
54 hours.....			103	14.8
60 hours.....	136	10.1		
Over 60 hours.....			8	1.1
New Mexico.....	263	100.0	229	100.0
Under 24 hours.....	184	70.0		
24 and under 32 hours.....			226	98.7
40 and under 44 hours.....	41	15.6		
48 hours.....	32	12.2		
Over 54 and under 60 hours.....			3	1.3
60 hours.....	6	2.2		
Oklahoma.....	2,064	100.0	2,137	100.0
36 and under 40 hours.....			189	8.9
44 hours.....	1,659	80.4	1,830	85.6
48 hours.....	405	19.6		
Over 48 and under 54 hours.....			118	5.5

¹ Data relate to State institutions in 13 States, and institutions in the District of Columbia.² Less than 1/10 of 1 percent.

TABLE 11.—*Classified Weekly Working Hours of Prisoners Productively Employed, in 1932 and 1936—Continued*

State, and full-time weekly hours	Prisoners productively employed during—			
	1932		1936	
	Average number	Percent	Average number	Percent
Oregon.....	352	100.0	278	100.0
Under 24 hours.....	6	1.7	2	.7
24 and under 32 hours.....	3	.9		
32 and under 36 hours.....			2	.7
36 and under 40 hours.....			267	96.1
40 and under 44 hours.....			7	2.5
44 hours.....	323	91.7		
Over 54 and under 60 hours.....	20	5.7		
Tennessee.....	2,063	100.0	2,064	100.0
40 and under 44 hours.....			1,049	50.8
44 hours.....			55	2.7
48 hours.....	650	31.5	29	1.4
Over 48 and under 54 hours.....	114	5.5		
54 hours.....	1,271	61.6	130	6.3
Over 54 and under 60 hours.....	11	.6		
60 hours.....	17	.8		
Over 60 hours.....			801	38.8
Utah.....	37	100.0	26	100.0
32 and under 36 hours.....			6	23.1
36 and under 40 hours.....	5	13.5		
40 and under 44 hours.....	32	86.5	20	76.9
Vermont.....	266	100.0	88	100.0
40 and under 44 hours.....	36	13.5		
44 hours.....	178	66.9		
Over 44 and under 48 hours.....			88	100.0
60 hours.....	52	19.6		
West Virginia.....	1,555	100.0	873	100.0
40 and under 44 hours.....			447	51.2
44 hours.....			342	39.2
48 hours.....			25	2.9
54 hours.....	1,555	100.0		
60 hours.....			59	6.7
Wyoming.....	278	100.0	87	100.0
40 and under 44 hours.....			8	9.2
44 hours.....	50	18.0		
Over 44 and under 48 hours.....	179	64.4	30	34.5
48 hours.....	49	17.6	49	56.3

Inmates Engaged in Prison Duties

When data for prisoners who are engaged in prison duties are examined an entirely different situation is revealed (table 12). No figures showing the actual working hours of prisoners so engaged are available. The type of work these prisoners are assigned to, as a rule, is not comparable with the productive labor in quality, quantity, or intensiveness. A prisoner tending the yard, or cleaning floors, may have a 40-hour week assignment, but it is certain that he does not labor as consistently as a prisoner assigned to a machine for a 40-hour week. The latter inmate probably works steadily while on the job; he is under close supervision and does not idle nor shirk. It is impossible to make a quantitative analysis of their work. If, however, the problem is approached from the proportion of the total prison popula-

tion which is assigned to prison duties some light is shed on the subject. Prison authorities have estimated that all the necessary prison tasks can be adequately discharged by from 15 to 25 percent of the prison inmates. One man in four assigned to this work is the top limit for reasonably steady work. If the ratio goes higher than that, in all probability the entire squad has some idle time each day.

Where there has been a decrease in productive labor, men have been added to the group engaged in prison duties in order to give as many inmates as possible something to do each day. In some of the institutions it was observed that a much larger force of ground tenders were working than were needed to do the work, and this applied to tier men, cell cleaners, kitchen help, and others. The proportion of men engaged in prison duties varied in the institutions studied in the periods under consideration.

If the top estimate that 25 men per 100 inmates are sufficient to perform the necessary prison duties adequately is reasonable, then there were too many men so assigned in 1923 in 6 State prison systems and the District of Columbia system; in 1932, 8 State prison systems and the District of Columbia system exceeded this ratio; and in 1936, 9 State prison systems and the District of Columbia system exceeded it (table 12).

In those prison systems where large farms are operated (as in Arkansas and Oklahoma) the term "prison duties" often covers what in free farming would be considered productive labor. Chore boys, water boys, stablemen, hostlers, etc., are considered engaged in prison duties rather than in productive labor and this may account for the relatively large number of inmates assigned to prison duties in those States.

TABLE 12.—Percent of All Prisoners Engaged in Prison Duties, by State and Year

State	Percent engaged in prison duties			State	Percent engaged in prison duties		
	1923	1932	1936		1923	1932	1936
All States covered.....	23.5	31.7	31.2	New Mexico.....	42.1	38.9	57.8
Arkansas.....	11.8	34.6	23.9	Oklahoma.....	34.2	48.1	40.5
California.....	28.5	38.7	38.3	Oregon.....	42.9	51.2	47.6
Delaware.....	26.6	36.1	44.2	Tennessee.....	10.4	20.5	26.5
District of Columbia.....	56.2	52.1	39.9	Utah.....	19.1	25.3	30.0
Kentucky.....	14.1	17.0	18.0	Vermont.....	25.0	31.2	28.0
Maryland.....	17.7	14.5	16.6	West Virginia.....	15.0	14.7	15.3
				Wyoming.....	32.1	23.6	25.4

Space does not permit the publication of detailed tables showing the kind and quantity of articles produced in each institution, but examination of these data indicates that institutions operating large farms or dealing in natural resources are able to employ more prisoners at productive labor than are institutions manufacturing commodities

only. Thus Arkansas (table 9) was able during the period 1923-36 to keep an average of about 70 percent of its prisoners productively employed, and Oklahoma about 50 percent. The systems with only small farms producing eatables largely for prison consumption, and manufacturing commodities also, provided productive employment for only from 15 to 50 percent of their inmates.

Sex of Prisoners

Women formed only a small part of the total population of the institutions—in 1923 only 2.1 percent; in 1932, 2.6 percent; and in 1936, 2.0 percent. In all 3 years a substantially larger percent of men than of women were productively employed. In 1923, 71.3 percent of the men and 35.4 percent of the women were employed at productive labor; in 1932, 57.2 percent of the men and 46.5 percent of the women were so employed; and in 1936 the ratio was 44.9 percent of the men and 29.8 percent of the women. A larger percentage of women than men are assigned to such duties as kitchen work and cleaning.

Vacations With Pay

EXTENT OF VACATIONS WITH PAY IN INDUSTRY, 1937 ¹

THE annual vacation with pay will soon become commonplace in American industry if the vacation movement continues to grow at the rate it has during recent years. More than one-fourth of the 19,842 manufacturing plants recently surveyed by the Bureau of Labor Statistics had a policy of vacations with pay for wage earners. The plants which gave vacations employed 43.3 percent, or 1,693,152 of the 3,912,019 wage earners in the manufacturing establishments covered. Giving the individual industries studied their proper weight in relation to all manufacturing, an estimated 39.3 percent of all wage earners in manufacturing industries were employed in plants which have wage-earner paid-vacation plans. The conditions which these employees are required to meet before actually qualifying for vacations vary widely. In some instances, certain occupational classes are excluded, although the prerequisites are usually limited to a minimum length of service with the employer.

The vacation movement in industry has been gaining momentum since the World War, but vacations with pay for wage earners have become general only in the past 2 years. The astonishing rapidity of their extension is shown by the fact that almost 40 percent of the plants which gave vacations to wage earners in 1937 reported that year as the first in which the plans became effective.

Scope of Survey

The survey was conducted by mail questionnaire. The firms canvassed, approximately 90,000 in number, were those which contribute to the Bureau monthly data on volume of employment and pay rolls. They represent the manufacturing and mining industries, wholesale and retail trade, public utilities, hotels, insurance, and various other industries, a representative cross section of each industry having been carefully built up over a period of years. The percentage of replies was very high, varying from 60 to more than 95 percent in the different industries. The usable replies for all manufacturing industries represented about 80 percent of the plants canvassed, and approximately

¹ Prepared by Frances Jones and Dorothy Smith of the Bureau's Division of Wages, Hours, and Working Conditions.

one-half of all wage earners. This includes the returns from an abbreviated follow-up questionnaire, which was used for correcting a probable bias due to heavier first returns from plants with vacation plans than from plants not having such plans. This heavy proportion of replies to a mail questionnaire is indicative of the widespread interest which has been aroused on the subject of paid vacations in industry.

The present article presents preliminary data concerning the frequency of paid-vacation plans in the manufacturing, mining, crude-petroleum-producing, and laundry and dry-cleaning industries. The complete report (which it is hoped will be released in bulletin form) will cover in greater detail the extent of vacations in the industries discussed in this article, as well as in all of the nonmanufacturing industries included in the survey. It will also include a detailed classification and description of the various plans in existence.

TABLE 1.—*Estimated Number of Wage Earners Under Vacation Plans in Manufacturing, Laundry, and Extractive Industries, by Industry Group, 1937*¹

[Reweighted in accordance with estimated total employment in June 1937]

Industry group	Estimated June 1937 employment	Wage earners under vacation plans	
		Estimated number	Percent of June 1937 employment
All industries covered.....	9, 570, 100	3, 512, 227	36.7
Manufacturing.....	8, 464, 100	3, 326, 391	39.3
Durable goods.....	4, 280, 400	2, 007, 508	46.9
Nondurable goods.....	4, 183, 700	1, 317, 866	31.5
Iron and steel and their products, not including machinery.....	871, 127	640, 278	73.5
Machinery, not including transportation equip- ment.....	1, 144, 066	726, 482	63.5
Transportation equipment.....	712, 264	166, 670	23.4
Nonferrous metals and their products.....	321, 881	182, 185	56.6
Lumber and allied products.....	663, 317	51, 075	7.7
Stone, clay, and glass products.....	259, 222	63, 509	24.5
Textiles and their products.....	1, 684, 800	155, 002	9.2
Fabrics.....	1, 102, 283	120, 149	10.9
Wearing apparel.....	518, 191	28, 500	5.5
Leather and its manufactures.....	303, 443	54, 620	18.0
Food and kindred products.....	645, 380	422, 724	65.5
Tobacco manufactures.....	83, 178	36, 266	43.6
Paper and printing.....	567, 746	135, 124	23.8
Chemicals and petroleum products.....	410, 678	354, 826	86.4
Rubber products.....	135, 912	98, 944	72.8
Nonmanufacturing:			
Laundries and dyeing and cleaning establishments..	309, 500	84, 702	27.4
Coal mining.....	529, 300	4, 854	.9
Metalliferous mining.....	87, 500	23, 538	26.9
Quarrying and nonmetallic mining.....	52, 500	10, 553	20.1
Crude-petroleum producing.....	127, 200	109, 519	86.1

¹ In determining the number of employees affected by vacations for the various industry groups, one should consider the element of bias due to the fact that some of the individual industries composing a given group were more cooperative in sending in reports than other individual industries. This bias may best be overcome by weighting the percentages of the individual industries by the estimated employment in them as of June 1937, which gives the estimated number of employees covered by vacation plans in the various industry groups, as well as in all industries covered.

The data presented herein are based on reports from 19,842 manufacturing plants which employed 3,912,019 wage earners and 670,869

salaried employees in the winter of 1937-38. Altogether, 97 manufacturing industries were covered. It also includes 1,188 laundries and dry-cleaning establishments with an employment of 55,440 wage earners and 12,930 salaried employees; 194 companies in the crude-petroleum-producing industry, with 36,951 wage earners and 13,480 salaried employees; and 1,011 mining companies with 268,860 wage earners and 20,325 salaried workers. The salaried employee group includes all office employees (except executives) and the plant clerical and technical workers and foremen. Data for the manufacturing and laundry industries are presented in terms of the plant unit. However, a plant count was not practicable in the mining, quarrying, and crude-petroleum-producing industries, and for these industries number of companies only was used.

Extent of Paid Vacations in Various Industries

The vast majority of *salaried* employees in industrial establishments have annual vacations with pay. Approximately 95 percent of the 700,000 included in this survey worked in plants which granted such vacations. Notwithstanding this high proportion of employees, more than one-fifth of the establishments do not yet give their salaried workers paid vacations, and in some individual industries the proportion is even higher. For example, scarcely more than one-half of the cigar factories and less than two-thirds of the plants in several of the textile groups, laundries, bottling plants, lumber mills, stone-finishing plants, quarries, and coal mines give vacations to their salaried employees.

Wage earners in 1937 were given annual vacations with pay, though to a widely variable extent, in virtually all industries. Only about 1 percent of the wage earners in coal mining were affected. On the other hand, more than 98 percent were granted paid vacations in two divisions of the chemical industry, namely the manufacture of druggists' preparations and petroleum refining. Of 102 industry classifications studied, 22 industries had paid-vacation plans for at least three-fourths of their wage earners, 42 for more than one-half, 63 for more than one-fourth, 82 for more than one-tenth, and 15 for less than 5 percent.

In terms of the proportion of wage earners that worked under paid-vacation plans, the chemical, food, rubber, and machinery industries, which were pioneers in this movement, were still among the leaders in 1937. The crude-petroleum-producing industry, in which vacations became common in 1920-29, is now crowding the chemical group (which includes petroleum refineries) for leadership. The iron and steel industry now ranks third, having forced rubber into fourth place when steel plants adopted paid-vacation plans en masse in 1936-37. The food, machinery, and nonferrous metals groups rank fifth, sixth,

and seventh, respectively, and complete the list of industry groups in which as many as one-half of the wage earners come under paid-vacation provisions.

For all manufacturing industries, the sample embraced in the Bureau's survey is, in terms of wage earners, an approximate 45 to 50 percent coverage; somewhat less than that was included for mining and crude-petroleum producing. This sample should be adequate to show the prevalence of paid vacations in each of the individual industries. However, in order to determine their approximate extensiveness in the manufacturing and mining industries as a whole, as well as in each subgroup of industries, the employees shown by the survey to be working under paid-vacation plans in the individual industries have been reweighted with relation to the estimated total employment for June 1937. This gives the estimated total number of employees under paid-vacation plans. The results are shown in table 1. This table indicates that more than 3,500,000 wage earners worked under paid-vacation plans in 1937 in the industry groups covered. The estimated number is 39 percent of all employed in the manufacturing industries, and 37 percent of the total employment in manufacturing, mining, crude-petroleum-producing, and laundries and dry-cleaning establishments combined.

Generally speaking, the industries in which vacations with pay for wage earners, as well as for salaried employees, are less extensive are those characterized by the prevalence of low wages, small plants, seasonal activity, heavy work, or isolated location. Thus, the mining and quarrying, lumber, and textile groups give vacations to very few workers. Tobacco, leather, paper and printing, stone, clay, and glass products, laundries, and transportation equipment (including automobiles) groups also fall more or less within this category.

Recent Growth of Paid-Vacation Movement

Office workers have been the beneficiaries of company paid-vacation policies for a substantial period of time. An annual vacation for them has become generally accepted. An examination of the dates of adoption of paid-vacation plans for salaried workers in the manufacturing and mining industries shows that probably three-fourths of the plants inaugurated their plans prior to 1930, the period of greatest extension in most of the industries being between 1920 and 1930. The earlier plans were more or less concentrated in the larger companies. During the post-war decade, however, the practice was adopted by large and small companies alike, until by 1930, less than 20 percent of the salaried workers were employed in plants which did not allow vacations with pay. In 1937, this figure had been reduced to 5 percent. The textile, lumber products, food, tobacco, mining, crude-petroleum-

producing, and laundry groups were slower than others in adopting such a policy, and they still have many plants which do not grant vacations to salaried workers. (See table 2.)

Although, as noted, paid vacations for salaried workers have been common for some time, their sphere of application has expanded in recent years to include minor salaried positions in both office and plant which were not covered by many of the earlier plans. It is still, however, not uncommon for plants to be less liberal with respect both to length of vacation and to qualifications as to length of service for the minor positions, particularly for the salaried positions in the plant as distinguished from the office.

Paid vacations for wage earners are a development of the twentieth century. It is true that a few American companies were pioneers in this movement prior to that time, first giving vacations to their older employees and later extending the practice to all employees. The Bureau's survey disclosed 32 plants of 24 companies which reported such early plans, the majority being in the food and chemical industries. An additional 44 manufacturing plants, likewise concentrated in the chemical and food industries, reported plans begun in the first decade of the twentieth century.

For the decade 1910-19, the Bureau sample shows 240 manufacturing plants which adopted this policy, as well as a few companies in the mining industries. Once more the chemical and food industries were in the foreground. Noticeable also was the gain in the machinery group, particularly in electrical machinery, and among the larger rubber companies. During this decade, vacations with pay were also adopted by 3 mining, 7 petroleum, and 8 laundry companies.

The impetus given by the World War to the interest in the subject of labor relations is reflected in the extension of wage-earner paid-vacation plans during 1920-29, when they appeared in practically all of the major industrial groups. Almost twice as many plans were adopted in that decade as had existed previously. Large gains were again made in electrical machinery, food, and chemicals, and plans became fairly numerous in printing, rubber products, crude-petroleum producing, and laundries and dry-cleaning establishments. It was also during this decade that vacation provisions began to appear in union agreements.

The movement toward paid vacations for wage earners received a temporary setback by the prolonged depression of 1930-34. Some plans were suspended,² but a significant number of plants (365 shown in this survey) adopted new plans during that period. Since 1934, however, the number of plants and wage earners working under paid-vacation plans has tripled. The steel industry accelerated the movement when the major companies announced a general application of

² National Industrial Conference Board, Studies No. 215: Vacations With Pay for Wage Earners, p. 9.

vacations with pay in the spring of 1936. During that and the following year, annual vacations with pay were extended to an estimated 2,000,000 wage earners in manufacturing and mining industries. Approximately 70 percent of the plants which reported paid-vacation plans in the Bureau's survey had inaugurated these plans during the 1930-37 period, and about 40 percent gave vacations for the first time in 1937.

Table 2 shows the distribution of plants and employees in the sample, by industrial group and class of employee, according to the period during which paid vacations were adopted. It should be observed that this sample is considerably smaller than the entire coverage in the survey, but it is fairly adequate for the purpose.

TABLE 2.—*Distribution of Plants and Employees by Period in Which Vacation Plan Was First Adopted*¹

Period of adoption	Manufacturing		Laundries and dyeing and cleaning establishments		Mining and quarrying		Crude-petroleum producing	
	Plants	Employees	Plants	Employees	Companies ²	Employees	Companies ²	Employees
<i>Salaried workers</i>								
All periods.....	9,080	485,968	297	5,910	344	11,546	102	11,332
Prior to 1900.....	386	72,691	14	199	15	1,487	-----	-----
1900-1909.....	648	40,676	10	245	27	1,744	3	836
1910-19.....	1,477	100,207	24	301	57	1,865	13	2,844
1920-29.....	2,288	79,969	91	2,230	120	1,932	32	3,367
1930-37.....	1,776	42,884	103	1,598	55	1,021	34	2,595
1935.....	253	6,416	11	188	8	85	3	24
1936.....	213	4,728	16	297	5	148	6	63
1937.....	337	8,460	42	542	11	143	3	172
Indefinite ³	2,505	149,541	55	1,337	77	3,497	22	1,690
<i>Wage earners</i>								
All periods.....	3,771	1,381,992	149	10,695	54	10,986	72	20,460
Prior to 1900.....	32	18,509	-----	-----	-----	-----	-----	-----
1900-1909.....	44	6,415	2	123	-----	-----	1	500
1910-19.....	240	136,352	8	820	3	708	7	3,065
1920-29.....	567	210,462	22	1,044	6	869	17	8,840
1930-37.....	2,637	985,933	104	7,774	44	9,016	37	6,722
1935.....	192	60,090	6	1,040	1	7	7	669
1936.....	589	413,008	14	734	14	4,590	7	225
1937.....	1,491	442,148	70	5,293	23	3,794	7	1,185
Indefinite ³	251	24,321	13	934	3	393	10	1,333

¹ This table shows some bias in favor of the later years, since it does not take into account the length of life of the company unit. See also footnote 3.

² A plant count in the mining, quarrying, and crude-petroleum-producing industries was not practicable, and the number of companies only was used.

³ This includes such reports as "For many years," "Since the organization of the company," and similar answers which indicate a plan of long standing.



PAID VACATIONS IN SWEDEN¹

AN ANNUAL vacation of 12 days for all Swedish workers and employees in public or private employ is provided by a new law in

¹ Data are from report of Rudolf E. Schoenfeld, Chargé d'Affaires ad interim, Stockholm, June 18, 1938.

Sweden, effective as of July 1, 1938. A worker or employee who has been in the service of the same employer for not less than 180 days is entitled to a vacation amounting to not less than 1 day for each month that he has been at work in the preceding calendar year. He shall, however, not receive vacation credit for any month in which he has not been at work for at least 16 days. The vacation shall exclude Sundays but shall include other holidays if it extends over a period of 6 consecutive days or more. Unless otherwise provided by special agreement with the employer, the vacation must be taken at one time. However agricultural workers and workers engaged in related types of work may be exempted from this provision and, if engaged exclusively in the care of livestock, they may be required to accept double pay instead of a vacation.

Wages and salaries payable during vacation may be based not only on the ordinary hourly, weekly, or monthly pay but also on ordinary piece-work rates if the worker has received pay wholly or in part on that basis.

Under the terms of the new law the vacation of 1 day per month to be granted in 1939 will be calculated only on the basis of the second half year of 1938. In consequence, in 1939 the vacation will amount to only 6 days. The full effect of the vacation law will become apparent only in 1940, when, for the first time, a full preceding calendar year (1939) will be used as the basis for calculating the length of a worker's vacation.

The vacation law contains a specific provision that the vacation provisions of existing collective agreements shall not be nullified by the new law but that the terms of the latter shall apply only as such wage contracts expire. In reality this provision has but little practical significance, inasmuch as most Swedish collective wage agreements now in effect run only for a year or at most 2 years. In consequence, practically all of them will have expired by the end of 1939.

Recreation

COMMUNITY RECREATION IN THE UNITED STATES, 1937

THE number of recreation facilities in 1937 throughout the country was considerably larger than in 1936, and there was an increase in the total expenditures for recreation from local funds.¹ There was, however, a marked curtailment of Federal emergency funds allocated to recreation projects, with a corresponding reduction in services in a number of communities. Total expenditures from local funds increased from approximately \$24,000,000 in 1936 to nearly \$25,800,000 in 1937, whereas emergency expenditures supplementing regular local expenditures fell from approximately \$32,000,000 in 1936 to \$22,000,000 in 1937. This drop is of especial significance because 16 additional cities reported emergency expenditures in 1937. The general curtailment was greatest in expenditures for land, buildings, and permanent improvements, which decreased 41 percent, while there was a 21 percent decrease in expenditures for leadership, salaries, and wages. The increased expenditures from local funds is accounted for in part by an increase of 88 cities reporting regular expenditures for recreation purposes and also by increases in the operating budgets in a number of the larger cities. Leadership salaries showed a greater increase in 1937 than any other budget item.

During 1937, 800 cities reported that 22,160 recreation workers were paid from regular funds—the largest number reported since 1932. Of the total number of leaders 12,438 were men and 9,711 women, the sex of the remainder not being reported. The number of workers employed on a full-time basis was increased from 2,792 in 1936 to 3,067 in 1937, and the number of cities reporting such workers increased from 288 to 319. A total of 18,253 emergency leaders to supplement the regular personnel was reported by 553 cities providing recreation service financed with regular funds; slightly more than half of these leaders were employed on a full-time basis. The number of volunteer workers reported by 301 cities was larger than in any year with the exception of 1933.

There were 9,618 outdoor playgrounds reported for 1937, as compared with 9,490 in 1936, but the increase was attributable mainly

¹ *Recreation* (New York), June 1938, pp. 123-175. Includes annual report of the National Recreation Association.

to the increase in the number of cities reporting. Both the total attendance at playgrounds and the average daily summer attendance were smaller in 1936 than in 1937, the first being accounted for by the fact that fewer cities reported in 1937 than in 1936, while no explanation is given of the smaller daily summer attendance. The total number of recreation buildings reported for 372 cities was 1,380, with a total attendance reported for 1,048 buildings of 56,000,000 persons. This was an increase of approximately 1,000,000 over the attendance figures for 1936, being generally accounted for by a large increase in the reported attendance at recreation buildings for colored people. A total of 3,854 indoor recreation centers was reported by 442 cities. The attendance at such centers fell about 25 percent in 1937, but was approximately the same as in 1935. With few exceptions the various types of outdoor recreation facilities showed substantial gains over those reported in 1936 both in total facilities and in number of cities reporting, but there was a reduction in the figures of total participation attendance. Definite increases over the 1936 figures were reported for attendance at bathing beaches, bowling greens, handball courts, picnic areas, shuffleboard courts, stadiums, and toboggan slides. Information was secured for the first time in a number of years regarding the extent to which school properties are used as centers of community activity. It was found that 43 percent of the playgrounds conducted under leadership in 1937 were school playgrounds and 42 percent of the athletic fields were on school property. Indoor facilities, including swimming pools, gymnasiums, etc., represented a still larger proportion of the total number of such facilities. It was estimated that at least two-thirds of the 3,854 indoor recreation centers reported in 1937 were school buildings. Special recreation facilities included arts and crafts for children and adults, a large number of athletic activities, dancing, drama, music, outing activities, water sports, special winter sports, and a group of miscellaneous activities. With few exceptions the number of cities reporting the various kinds of special activities was larger in 1937 than in 1936.

International Labor Relations

RESULTS OF INTERNATIONAL LABOR CONFERENCE, JUNE 1938

By JOHN S. GAMBS, *Assistant U. S. Labor Commissioner, Geneva, Switzerland*

THE 1938 Conference of the International Labor Organization, held in Geneva in June, adopted one new convention and did a very great amount of preparatory work in regard to several new and important conventions to be considered at future sessions. Of particular interest to the United States was the election, at a special meeting of the Governing Body, of John G. Winant as Director of the International Labor Office to succeed Harold Butler. Mr. Winant will take up his new duties on January 1, 1939.

Despite the unsettled condition of world affairs, the Conference numbered 410 representatives from 50 countries; it thus had an attendance practically equal to last year's Conference which established a record figure. Nine Ministers of Labor were present; there were also many prominent trade-union leaders and important officers of employers' organizations. The Soviet Union was the only large member-State that did not send a delegation. Italy and Germany, no longer members of the organization, were not represented at the Conference.

The American governmental delegates were Secretary Perkins, Miss Frieda S. Miller, and Carter Goodrich; the employers' delegate was Henry I. Harriman, and the workers' delegate Robert J. Watt. Each Group had its staff of technical advisers.¹ These American

¹ The entire delegation was as follows: Government delegates—Miss Frances Perkins, Secretary of Labor (from June 11–18); Miss Frieda S. Miller, New York State Department of Labor; Carter Goodrich, U. S. Labor Commissioner, Geneva. Government advisers—Mrs. Clara M. Beyer, Assistant Director, Division of Labor Standards, Department of Labor; A. F. Hinrichs, Chief Economist, Bureau of Labor Statistics, Department of Labor; H. H. Kelly, Chief, Safety Section, Bureau of Motor Carriers, Interstate Commerce Commission; W. E. Chalmers, Department of Labor; John S. Gambs, Assistant U. S. Labor Commissioner, Geneva; Llewellyn E. Thompson, Jr., American Consul, Geneva. Employers' delegate—Henry I. Harriman, Chairman of the Board, New England Power Association, Boston. Employers' advisers—William T. Foster, Director of the Pollak Foundation for Economic Research, Boston; Ivan Bowen, General Counsel National Association of Motor Bus Operators, Minneapolis, Minn. Workers' delegate—Robert J. Watt, Director of Social Security Policy, A. F. of L. Advisers—Marion Hedges, Director of Research, International Brotherhood of Electrical Workers; George Googe, Southern Representative, A. F. of L.; A. D. Lewis, International Representative, United Mine Workers of America; Phil E. Ziegler, Secretary-Treasurer, Brotherhood of Railway and Steamship Clerks, Cincinnati, Ohio; Hyman Blumberg, Vice-President, Amalgamated Clothing Workers of America, New York City; Joseph Cohen, Chairman, Legislative Committee, Typographical Union of Philadelphia. Secretary to the delegation—Miss Harriet Hopkinson, U. S. Department of Labor, Geneva.

members of the Conference took active part in committee work and in plenary sessions.²

Statistical Convention

The one convention that was drafted and adopted aims to make statistics of hours of work and wages more easily comparable internationally. When it is ratified by a sufficient number of countries, a landmark will have been reached in a world-wide exchange of significant labor information and better tools for the analysis of labor problems will have been supplied. This convention had the distinction of being adopted without a single opposing vote—though there were some abstentions—a rather remarkable thing, in view of the fact that 50 governments were represented, as well as employers and workers from all quarters of the globe. The final preparatory work after a number of years of discussion was done last September when the I. L. O. convened a Technical Conference of Official Labor Statisticians. Dr. Isador Lubin, United States Commissioner of Labor Statistics, was one of the vice-presidents of this conference.

Reduction of Hours of Work

Perhaps the most important preparatory work of the Conference was done in the Hours of Work Committee. The work of this committee will result in a consultation of the governments of member States. By the time this article appears in print, most of the governments of the world will have a questionnaire, based on the committee report. This questionnaire will enable governments to express their attitudes toward the problem of the reduced working week, both broadly and in detail. It is on the basis of the replies that a convention, or conventions, will be drafted for a diminution of hours of labor. Next year the International Labor Conference will examine and discuss the drafted texts. If a convention is adopted, it will be submitted to the governments for ratification; if not, some new approach to the problem will probably be formulated, or it will be necessary to wait until world opinion is more explicit in its demand for a reduced working week.

Throughout its history, the I. L. O. has sought to limit hours of work. Between 1919 and 1930 its efforts were directed toward the framing of international conventions concerning the 48-hour week. By 1931 the principle of the 48-hour week had been established in two international conventions, one applicable to industry, the other to commerce and offices. Beginning in 1929, fresh efforts were made

² Miss Miller acted as reporter for the Road Transport Committee, Mr. Goodrich as chairman and reporter of the Standing Orders Committee, Mr. Harriman as employers' vice chairman of the Committee on Technical Education, and Mr. Blumberg as workers' vice chairman of the Committee on Resolutions. Mr. Harriman and Mr. Watt served as members of the executive committees of the employers' and workers' groups, respectively, of the Conference.

to reduce hours still further, and they have centered on the ideal of the 40-hour week. The best procedure to adopt in attaining this ideal has not been easy to discover. There have been two schools of thought on this problem. The first has held that there should be a single, all-inclusive convention, for all industries; the second has held that this method was inflexible and unrealistic, and that there should be a considerable number of conventions to cover a variety of industries.³ Each approach has its advantages as well as disadvantages; the former was the method of the 48-hour conventions; the latter led to the textile and maritime conventions.

This year, one of the most important decisions made by the Hours of Work Committee was that its labors should prepare the way, not for one convention or for many, but for a limited number. Though the item before it on the agenda embraced as a unit the whole of economic life except the maritime industry and agriculture, the committee took the view that under this large unit there might well be several subdivisions. One such subdivision was the coal industry. On this the committee and Conference adopted the suggestion of the Technical Tripartite Meeting of May 1938, and put the reduction of hours of work in coal mines on the agenda of the 1939 Conference as a separate item. A somewhat similar procedure was recommended and adopted for the transport industry, with an important difference: the technical meeting has already been held in the coal industry, but in the case of the transport industries, the Governing Body is asked to convene one or more preparatory technical meetings. This leaves the general field of industry and commerce and offices to be discussed as a single item for next year, with, however, the possibility that this broad subject will be divided, and that there will be two draft conventions instead of only one.

After this question of procedure had been cleared away—at least for this year—the Hours of Work Committee went into a discussion of flexibility of application of a general hours convention. This embraced questions of overtime, making up of lost time, special limitations for certain kinds of occupations, like the hotel and restaurant occupations. There were discussions relating to the gradual application of conventions by stages—that is, the possibility of reducing the working week over a period of 3 years from 44 to 40. This committee, besides, created a precedent in considering another type of flexibility: the case for exempting certain countries from certain provisions of the future hours conventions, when ratified. These exemptions would permit countries of sparse population or of a primitive stage of economic development to limit the application of any hours conventions they may ratify without their being considered to have violated their treaty obligations.

³ See *Monthly Labor Review*, August 1937 (p. 345).

In the plenary sessions, delegates from various countries discussed the merits of the reduced working week, and the French Minister of Labor, M. Ramadier, attributed to the 40-hour week in France a large role in the reduction of unemployment. The New Zealand delegate spoke of the increased well-being of his country under the reduced working week, while American delegates testified that a reduction of hours in the United States had been followed by salutary results. During the sessions of this Conference the Congress of the United States passed the Fair Labor Standards Act, and this undoubtedly made a profound impression on many delegates.

There were a number of countries that could not approve unqualifiedly of the reduced working week. Among them were those countries which find it necessary to devote their national energies to a speedy production of armaments. Concerning this retarding force on the 40-hour week, Mr. Butler, Director of the I. L. O., said: "You can have excessive armaments or you can have social progress, but in the long run you cannot have both." Yet Mr. Butler felt that even in this very process of arms construction there lay hope for the eventual triumph of the reduction of hours:

No country in the world has a bottomless purse. The present tempo is strictly and mathematically limited. When it slows down, it will almost certainly be found that machinery and processes have been improved, that the pace of production has been intensified, that new methods of economizing men and material have been discovered. In that case, the tendencies making for a reduction of hours will have been accentuated rather than diminished. The problem will not only remain, but its solution will have become more urgent.

It is clear from all this that during the next several months a large part of the energies of the I. L. O. will again be devoted to one of the most significant and contentious of labor problems, the reduction of hours. It would be an overstatement to say that this year's Conference launched the Organization off to a new and more hopeful start in its attack on an old problem. But one could detect from the tenor of the discussions that the proponents of the shorter working week exhibited a new willingness to yield to the demands of flexibility and realism, while the opponents were more willing to listen to the arguments that can be made to defend a general reduction of hours. The votes taken in the Conference give at least some confirmation of this view. To be sure, the questions voted on were not approval or disapproval of the shorter working week, but only the matter of keeping or not keeping the problem sharply before the Organization by placing it on next year's agenda. A number of delegates, including those of the British Government, made it clear that their affirmative votes in no sense committed them to an approval of the general principle of reducing hours; their votes indicated only a willingness to continue discussions. Neither governments, employers, nor work-

ers are bound to vote in the future as they voted last June. Despite all this, it is of some significance that all the votes on hours reduction were in favor, by large majorities, of keeping the question alive for at least another year.⁴

Road Transport

The Committee on Hours of Work in Road Transport, like the Reduction of Hours Committee, did a large amount of preparatory work, directed toward the drafting of a convention for submission to the Conference next year. In the past 12 years the I. L. O. has concerned itself, in one way or another, with proposals for the international regulation of the conditions of employment of road transport workers. Although the question of road transport has—as far as concerns the I. L. O.—been principally a matter relating to the length of the working week, the Governing Body felt that it would be better to put this problem on the agenda as a separate item, rather than as a subhead under the broader topic of hours of work.

Some delegates on the Transport Committee who were interested in a shorter workweek were interested only in reduction to a point that would insure a reasonable degree of safety; others, however, felt that a reduction of hours might very well go beyond this point, as a measure of social value.

Other interesting questions arose. Should a distinction be made between waiting time and hours actually on duty? Do road-transport workers include automobile mechanics and warehousemen, or only drivers and their riding assistants? Perhaps the most serious question concerning the definition of road-transport workers was whether owner-drivers were to be covered. There is precedent for the view that the I. L. O. is competent to propose labor legislation "which, in order to protect certain classes of workers, also regulates incidentally the same work when performed by the employer himself."⁵ Governments will be consulted on this latter question, and on many others, including those given above. When the replies are in, they will be used as a basis for drafting a proposed convention on this industry. The vote to place the question of regulating the hours of work of drivers and their assistants on the agenda of the 1939 session of the Conference was: Yes, 96, No, 27, Abstentions, 11. As in the other hours votes, the French and American employers' delegates were the only ones of their group to vote Yes.

⁴ The details of the votes were as follows: The large question of placing on the agenda of the 1939 session of the Conference the question of the reduction of hours in industry, commerce, and offices, was carried by 92 to 27 with 19 abstentions. The No's were all cast by members of the employers' group; the Yes's were cast by government delegates, workers' delegates, and by the French and American employers' delegates. The decision on Transport was taken by an almost identical vote; that on Coal Mines was somewhat closer, with the Yugoslav Government votes cast against, the total vote being 82 to 29, with 27 abstentions. The majorities were in all cases well above the necessary two-thirds.

⁵ Provisional Record of the Conference, No. 24, p. xviii.

Technical Education

The Committee on Technical Education laid the groundwork for a recommendation rather than a convention. A recommendation is a proposal which has less force than a convention: the latter when ratified has the force of a treaty, while the former is submitted to member States "for consideration with a view to effect being given to it by national legislation or otherwise."⁶ The following extracts from the committee report succinctly describe the general drift of the discussion:

This discussion showed that employers and workers, as well as governments were greatly interested at the present time in the question of vocational education. Several speakers emphasized, in particular, the necessity for cooperation between the various bodies interested in vocational education for the purpose of coordinating a policy which would be in accordance with the interests of the worker as well as the requirements of undertakings and of the national economy. Another point to which some of the speakers called special attention was the desirability of avoiding premature specialization in the case of young workers and of scope for greater adaptation on the part of skilled workers, who belonged to particular industries or were engaged in technical processes which were constantly changing. Finally, the importance of supplementary school education was pointed out, as well as the need for providing workers admitted into employment before they had received any kind of training with facilities for vocational education.

Some of the speakers especially dwelt on the importance of apprenticeship which, according to them, was the principal problem that the Conference was called upon to consider in this connection. They regretted that the Office had given it a comparatively secondary place in its conclusions. It was, however, pointed out that apprenticeship should not be regarded as being in opposition to other methods of vocational training. Apprenticeship was doubtless at the root of the whole matter, but it had to be considered as part of the general question of technical education, the whole object of which was to prepare for apprenticeship, to increase its effectiveness, and to complete it or to provide a substitute for it.

Some attention was paid to vocational guidance and to the risk of undermining the results of private initiative by strict State supervision. There was sharp difference of opinion as to whether trade-unions should guide apprenticeship.

Migrant Workers and Indigenous Workers' Contracts

There were two committees on which the United States Government was not represented because of the limited extent to which this country is involved. One of these committees discussed proposals which seek to secure equal treatment for migrant workers in countries where there is substantial immigration; the other dealt with the contracts of employment of native workers—a problem which concerns principally Great Britain and the Dominions, Belgium, Spain, France, Italy, Japan, Liberia, the Netherlands and Portugal. Both com-

⁶ Constitution and Standing Orders of the I. L. O., Conference Edition, 1938, art. 19, p. 11.

mittees pushed their preparatory efforts to a far point; and, as a result of their labors, draft conventions will be submitted for adoption next year.

Standing Orders

The Committee on Standing Orders, or bylaws, undertook the task of revising the procedure under which conventions and recommendations are considered and adopted. Under the old rules, the only recognized method has been that of double discussion by which an item is considered in a preliminary fashion at one Conference, and adopted or rejected at the Conference of the following year. In practice, however, the Conference had on a number of occasions suspended its standing orders and adopted a convention after a single discussion. The Organization had also developed the very serviceable method of holding the preliminary discussion on certain items not in the ordinary full Conference but in special preparatory technical meetings like the Coal Conference of May 1938. To regularize these procedures, therefore, and to provide sufficient diversity so that each question could be treated by the most suitable method, the committee proposed that formal provisions should be made for the three alternatives of double discussion, of single discussion preceded by a preparatory technical conference, and in certain cases of single discussion without such preliminaries.

The committee also recommended provisions assuring more time for distant countries like the United States to consider the documents bearing on the agenda items, and other changes intended to promote greater realism in the discussion. On all these points, the proposals of the committee were adopted by the Conference.

American Regional Conference and Other Resolutions

This was a year of relatively few resolutions. The most important was the resolution to hold a regional American Conference. The director of the office, Mr. Butler, in his annual report, stated that, in his opinion, the center of gravity of the I. L. O. was shifting westward. There is no doubt that the Americas have taken considerable interest in the I. L. O. in recent years. An instance—to mention only one—was the favorable response to the regional Conference in Santiago, Chile, in 1936. So successful, indeed, was this meeting, that the Conference at this session recommended that the Governing Body convene a similar regional conference in 1939. The exact time and place have not yet been decided on, but the Governing Body took provisional measures to insure that funds could be made available.

Another important resolution was submitted by M. Jouhaux, representing French workers. It urged the renunciation of discrimination which might affect workers belonging to certain races or confessions.



RATIFICATION OF INTERNATIONAL MARITIME CONVENTIONS BY THE UNITED STATES¹

THE maritime sessions of the International Labor Conference of 1936 adopted six draft conventions and two recommendations designed to promote safety at sea and to provide better working conditions and greater protection for seamen. At that conference the United States was represented by four delegates—two representing the Government, one representing the American shipowners, and one representing American maritime labor.

In the United States, the Federal Government has exclusive jurisdiction over maritime employments. These conventions and recommendations, together with comments from various interested Departments of the Government, were submitted to the Senate by the President on August 10, 1937. On June 13, 1938, the Senate gave its official approval to five of the conventions. These concerned (1) holidays with pay for seamen; (2) minimum age for employment of children at sea; (3) hours of work on board ship, and manning; (4) minimum requirements of professional capacity for masters and officers on board merchant ships; (5) liability of the shipowner in case of sickness, injury, or death of seamen. These are the first I. L. O. conventions or treaties to be ratified by the United States. A sixth draft convention concerning sickness insurance for seamen was not adopted. While the subject was considered worthy of consideration by the officials of the Government, it was not recommended, but was made contingent upon a thorough survey and study, indicating that the creation of such a system would be desirable. No positive action was taken by the Senate on the two recommendations concerning the promotion of seamen's welfare in ports, and on hours of work on board and the manning of coastwise ships.

Reservations appended to the ratifications limited the scope of certain of the conventions to the high seas, and excluded the Philippine Islands and Panama Canal Zone from the application of all the conventions.

Summaries of the approved conventions follow:

Holidays With Pay for Seamen

This convention applies to the masters, officers, and members of the crew of seagoing vessels (except fishing and whaling vessels), which

¹ See articles on this subject in *Monthly Labor Review* for May 1936 (p. 1181) and February 1937 (p. 349).

are engaged in the transport of cargo or passengers. Such employees are entitled, after one year of continuous service with the same employer, to an annual vacation with pay. Masters, officers, and wireless operators are to receive a vacation of not less than 12 working days, while other members of the crew will receive a vacation of 9 days. Nothing in the convention, however, will affect any law or agreement which provides for a longer vacation.

In order to become effective, the convention must be ratified by 5 members of the International Labor Organization having more than 1,000,000 gross tons of seagoing merchant shipping each.² The ratification is effective for 10 years, at the end of which time a member may withdraw its ratification upon proper notice.

Regulation of Child Labor at Sea

This convention provides that children under 15 may not be employed on vessels; this prohibition, however, does not apply to properly supervised school ships nor to vessels on which only members of the same family are employed. National laws or regulations may provide for the issuance of certificates of employment to children of 14 in cases in which an educational or other authority is satisfied that the employment will be beneficial to the child. Every shipmaster is required to keep a register of all children under 16 years of age employed on his vessel.

The convention will not become effective until the adoption of draft conventions revising conventions fixing the minimum age in industrial and nonindustrial employments. It must then be ratified by at least two members of the International Labor Organization,³ and will become effective 12 months thereafter.

Hours of Work and Manning

This convention consists of 29 articles containing detailed provisions regarding the hours of work and manning scales for the personnel of vessels. It covers all seagoing, mechanically propelled vessels, with a few exceptions which include fishing and whaling vessels. The hours of work provision specifically excludes several groups of employees, among which are wireless operators, pilots, and others.

An 8-hour day and 48-hour week is prescribed in port for watchkeeping officers; and for deck and engine-room day workers, both at sea and in port, there is a similar limitation. At sea, the hours of labor for watchkeeping deck personnel on ships of over 2,000 tons, and for watchkeeping engine-room and stokehold personnel on ships of over 700 tons, are limited to 8 hours a day and 56 hours a week. In catering and clerical departments, at least 12 hours' rest during any

² Thus far only two other countries—Belgium and France—have ratified.

³ This convention has been ratified by Belgium, Iraq, Norway, and Sweden, but (as noted) revisions made in the previous convention must be acted upon.

24-hour period, including at least 8 consecutive hours of rest, is required. The limit for all such employees while in port is 8 hours.

Overtime is permitted, but overtime rates (to be prescribed by laws, regulations, or collective agreements) must be paid. Night work is prohibited for employees under 16 years of age. In certain emergencies the hour limitations may be exceeded.

The section on manning requires that all vessels of more than 700 tons must be sufficiently manned in order to insure safety of life and the observance of the hours limitations prescribed. On vessels exceeding 700 tons, there must be 2 certificated deck officers, besides the master, and on vessels of more than 2,000 tons, 3 deck officers are required. At least 3 engineers must be carried on vessels of over 700 tons or 800 horsepower, but this requirement may be postponed for 5 years for vessels not exceeding 1,500 tons or 1,000 horsepower. Six seamen must be carried on vessels of over 700 tons, and at least 9 on those exceeding 2,000 tons.

The convention becomes effective 6 months after it has been ratified by 5 member countries, each having shipping tonnage of 1,000,000 tons.⁴ Each ratifying country is required to establish an adequate system of enforcement, and in framing laws, shipowners', officers', and seamen's organizations are to be consulted as far as possible. Exemption certificates may be granted to vessels already constructed, if it is impracticable for them to accommodate the required crew.

Minimum Requirement of Professional Capacity

This convention applies to all seagoing ships except ships of war, Government vessels, primitive ships, or vessels of less than 200 tons which are exempted by national law. It provides that masters, chief engineers, navigating officers, and engineers must hold certificates of competency issued by public authority before they will be permitted to perform their duties.

Certain minimum conditions must be fulfilled before any certificate of competency is issued. These include a minimum age, a minimum period of professional experience, and the passing of certain examinations. The details of the application of these conditions are not specified, but are to be determined by national law. For a period of 3 years after ratification of the convention, persons with sufficient practical experience may be certificated without having passed an examination.

Each ratifying country is required to establish an efficient system of inspection and to prescribe penalties or disciplinary measures for breaches of the convention. Members are also required to cooperate with other members with a view to detaining ships wrongfully carrying uncertificated officers.

⁴ This convention has been ratified by Belgium, France, and Sweden.

The convention is binding only upon members of the International Labor Organization whose ratifications have been registered with the Secretary-General of the League of Nations. It comes into force 12 months after the ratifications of two members have been registered.⁵ Ratifications by other members become effective 12 months after registration.

Liability of Shipowners in Case of Sickness, Injury, or Death of Seamen

This convention is applicable to all persons employed on board any vessel ordinarily engaged in maritime navigation, except ships of war. However, any member, in its national law or regulations, is authorized to exempt persons employed on certain vessels, including vessels of public authorities (when not engaged in trade), coastwise fishing vessels, and others.

The shipowner is liable for any sickness or injury incurred in the course of employment, or death resulting from such disablement. National laws or regulations may make exception of injuries incurred otherwise than in the ship's service, injuries and sickness due to willful acts, default, or misbehavior, and sickness concealed when the contract of employment was made. The shipowner also will not be liable if at the time of the engagement the person employed refused a medical examination.

The shipowner is required to furnish medical care and maintenance, including board and lodging, until the disabled person has been cured or the disability has been declared permanent. However, national laws or regulations may limit liability for these expenses to not less than 16 weeks. In countries where there are arrangements for compulsory insurance, the shipowner may be relieved of liability to the extent of the coverage of the insurance plans.

In cases where the sickness or injury results in incapacity for work, the shipowner must pay wages as long as the disabled person remains on board. If he has dependents, the wages prescribed by national laws or regulations must be paid from the time he lands until he is cured or the incapacity becomes permanent. Such payments, however, may be limited to the wages for 16 weeks from the date of injury. The shipowner is also required to pay the expense of returning to his home every disabled person who is landed during a voyage.

This convention becomes effective 12 months after the date on which the ratifications of two members have been registered.⁶ Ratifications by other members also become effective for any member 12 months after the date on which its ratification has been registered.

⁵ This convention has been ratified by Belgium, Estonia, France, New Zealand, and Norway.

⁶ This convention has been ratified by Belgium and France.

Minimum Wages and Maximum Hours

REGULATION OF WAGES AND HOURS IN NEW ZEALAND ¹

THE Government of the Dominion of New Zealand exercises extensive control over working conditions in industry. This is accomplished in three ways of which the most important, as regards the number of workers covered, is the system whereby the Court of Arbitration makes awards applying to individual branches of employment, following a procedure determined by law. Under another method, collective agreements entered into voluntarily by employers and employees are made generally applicable to the industry. Lastly, minimum requirements are set up by statute for employees of broadly defined types of business organizations. The conditions of civil servants are, of course, determined directly by the public authorities. Domestic servants and outside salesmen are now the only important groups whose working conditions are not subject to some form of Government regulation of wages and working hours.

Employers and employees have ready access to the facilities of the Court of Arbitration, for, although individual awards are limited to a specified group of workers, any group may bring its case up for review provided the members belong to a registered union. In practice the awards of the court have come to take precedence over provisions for control established by special legislation. Whereas, formerly, laws were passed to protect workers in certain unorganized industries, such as mining and shipping, labor groups in these industries have subsequently organized unions and take their cases to the court for awards. This procedure has brought about more rapid revisions in wages and hours than are ordinarily obtained by bringing laws up for amendment. With few exceptions, workers have secured better conditions under court award than those provided by existing statute covering their particular branch of industry.

The Court of Arbitration

Determination of terms of employment by court award is a long-established practice in New Zealand. The basic statutes providing such regulation have undergone numerous changes, but at present the

¹ Data are from reports of Glion Curtis, Jr., American vice consul at Wellington, December 10, 1937, and January 5, 1938.

powers of the court are broader than at any previous time. This has resulted from the extensive legislative changes made, beginning in 1936, under the labor Government.

HISTORICAL SUMMARY

The Court of Arbitration was first provided for under the terms of the Industrial Conciliation and Arbitration Act of 1894. This law had three primary purposes, (1) the formation of boards to bring about the settlement of labor disputes, (2) the registration of unions of employers and employees, and (3) the making and filing of legally enforceable industrial agreements and court awards. Operations were commenced in 1896, and in December of that year an award was made containing a minimum-wage provision, although nothing in the act specifically granted this power. Two years later, in 1898, the law was amended permitting the Court of Arbitration to include minimum wages in its awards. Since then practically all awards have contained sections dealing with wages and, beginning shortly afterwards, maximum hours were also included.

By law of 1911 the court was empowered to convert an industrial agreement into an award, if the agreement did not conflict with an existing award and was not contrary to public interest. The law further provided that recommendations of the conciliation councils automatically became equivalent to industrial agreements, in cases where none of the parties to a dispute disagreed with the findings within a fixed period of time.

Awards and industrial agreements were subject to review during their effective period by the terms of the War Legislation and Statute Amendment Act passed in 1918. This was the first action permitting the revision of wage rates during the term of such an award or agreement and was taken in order to compensate for rises in the cost of living.

In April of the following year, 1919, the court established a new procedure. In addition to the practice of fixing minimum wages in individual awards, certain basic rates were announced which, with few exceptions, the court would consider the absolute minimum in fixing future awards. These rates were for skilled, semiskilled, and unskilled workers, respectively, and were calculated taking into account cost of living. The system remained effective until 1925, when it was abandoned until reinaugurated in 1936.

The method of determining wage rates in awards upon a sliding scale dependent upon changes in commodity prices was introduced in 1928. The first award containing such a provision covered shearers and woolshed hands, and covered a period of 5 years. Instead of providing a fixed minimum, the rate was to move in a fixed relation to the Government statistician's index number for export prices of wool, the adjust-

ment being made once a year for the ensuing 12 months. Although this method was abandoned in 1931 and 1932, it was resumed in 1933. The measure was adopted as a means of counteracting the disadvantages of inflexible wage rates in periods of changing economic conditions. Later legislation controlling the wages of agricultural labor has given it added importance.

When the general depression created disequilibrium between wage rates and the general price level, the Court of Arbitration was granted the power, under the terms of the Finance Act, 1931, to amend its awards or the industrial agreements with respect to wage rates by general order. This resulted in a fairly general wage reduction of 10 percent beginning on June 1, 1931. Full or partial restorations of these reductions were authorized in 1934 and 1935. They were fully restored effective July 1, 1936, under the provisions of the financial legislation enacted during that year.

LEGISLATION SINCE 1936

The scope of the legislation controlling working conditions was materially broadened by the legislation adopted in 1936 and 1937. The three most important basic laws (the Industrial Conciliation and Arbitration Act, the Factories Act, and the Shops and Offices Act) were amended in 1936 in order to shorten the working week. In addition, legislation has redefined the coverage of industrial awards, and provided for basic and standard wages.

Industrial coverage.—After the arbitration law was amended in 1936, an adverse court decision threatened to bar clerical workers from the benefits of the law. The difficulty arose over the technicality of whether or not a clerical workers' union might represent an "industry" within the meaning of the law. The Court of Appeal held that such a union could not be so considered, but that clerks in each industry where they might be employed could properly join a union that would be eligible for registration, thereby making it possible for them to benefit from an award of the Court of Arbitration. Following this decision, the arbitration law was amended on September 30, 1937, redefining "industry" to include: "(a) any business, trade, manufacture, undertaking or calling of employees, and (b) any calling service, employment, handicraft, or the occupation of workers." The amendment makes it possible for any vocational group to form a union even though its members may be employed in different types of establishments.

Hours.—The arbitration, factory, and shop laws were amended simultaneously to provide the 40-hour week in factories and the 44-hour week in shops and offices as of September 1, 1936. However, the amendment to the Arbitration Act had the most practical effect, covering as it does the largest number of workers. By the terms of

this legislation, Parliament directed the Court of Arbitration to include the hours provisions stipulated unless, after hearing representatives of employers and employees, this was found impracticable. In cases where the hours are not so reduced the court is required to indicate in its award the grounds for not having taken such action. The court is empowered also to amend existing awards and agreements to conform with the 40-hour standard and to eliminate Saturday work insofar as possible. Where existing hours are modified the wages may not be reduced because of the shortened working time.

Wages.—The Industrial Conciliation and Arbitration Amendment Act of 1936 requires the court to fix, by general order and on its own initiative, basic wages for adult male and adult female workers employed in any industry to which any award or collective agreement applies. These basic rates may be amended at 6-month intervals. In establishing the basic pay the act requires that the general economic and financial conditions affecting the trade or industry and the cost of living must be taken into consideration; and for adult males the sum allowed must be sufficient to maintain a man, wife, and three children in fair and reasonable standard of comfort.

The court may exempt certain workers from the minimum limit prescribed, but all other employees subject to the terms of either an award or agreement, regardless of the provisions of that award or agreement, must receive at least the basic wage. As most awards and agreements establish wages that are considerably above the basic rate, this provision has a very limited effect.

After basic rates were fixed under the amended arbitration law the question of special rates for part-time workers was raised. The court made a specific award for part-time employees on an hourly basis rather than on a weekly one as was done for fully-employed workers. It was also considered expedient to establish minima for workers paid by the hour instead of by the week, as hourly workers have no assurance of 40 hours of work and would earn less than the basic weekly rates if not employed full time. For hourly workers the rate was therefore set so as to net 5 shillings above the weekly rate for 40 hours.

These standard rates for part-time and hourly workers were not provided for by the law. Notification of these rates is made to industry by the court, in advance of pronouncing awards, as an indication of what minima will be laid down in such awards. These rates are subject to revision, like basic rates. In taking this action the court was motivated by a desire to foster voluntary agreements between employers and employees. If effective, this measure would have reduced the number of awards that the court would have had to make. However, the plan did not work out as anticipated as a preference existed for having the court initiate rates.

When a case is brought before the Court of Arbitration for an award, it has received prior consideration by the conciliation council for the particular industry. Such councils consist of experts and if they fail to bring about agreement between employers and employees they have at least settled the main technicalities, leaving important questions, such as wages, hours, overtime and holiday pay, to the court for settlement. In addition to the findings of the council that has handled a particular case, the court has its own determinations on basic wages and pay for part-time and hourly workers, and the laws governing working conditions, such as maximum hours, as guides in its deliberations.

The court, consisting of a judge or chairman, one representative of employers and one of employees, makes awards based on all of the factors mentioned and only after hearings have been held. These hearings must be registered by mutual consent and approved by the court. As previously mentioned, the award rates are substantially higher than the basic rates. They are made taking into account skill and geographic or trade conditions. The degree of prosperity in an industry affects the wage rates under a policy recently introduced. As the rates established are minima it is customary to pay specially capable workers above the schedule laid down by award.

Legalization of Collective Agreements

As an alternative to submitting their case for an award covering working conditions, employers and employees have the option of entering into a collective agreement establishing the terms of employment. These collective agreements when filed with the Government have equal effectiveness with awards of the court. Agreements reached as a result of settlement of an industrial dispute before a conciliation council may also be accepted. Applications for exemption under the latter type of agreement must be filed with the Court of Arbitration within 1 month from the date the agreement is filed. The court may or may not grant exemption.

Regardless of the method by which a collective agreement is reached, if it applies to the majority of workers in an industry, it may be made binding for the entire industry. Similarly an award of the court may be made binding on all employers in an industry or the district to which it relates, if it applies to the majority of employers. The court may take this action by means of a general order.

Laws for Special Groups of Workers

As already mentioned the factories and shops and offices laws have been amended in order to conform with the new provisions of the arbitration legislation. Employers must comply with the pertinent provisions of all three, insofar as applicable to their business, or be liable

to prosecution by the Labor Department. Historically the provisions of other labor laws are significant—for example, acts regulating working conditions of mine labor and employees in the shipping industry. However, better terms of employment are usually guaranteed labor in these industries at present under court awards. A significant law relating to a specialized class of labor was promulgated in 1936. It provides for control of the working conditions of persons engaged in agriculture and was the initial step in extending to farm labor protection similar to that accorded other workers.

FACTORIES ACT

Although the first Factories Act was that of 1891, it was not until 1901 that the amended law provided for specified maximum working hours for men. The limits on hours then remained practically unchanged until 1936. Working time could not exceed 48 hours per week, 8¼ hours per day, nor more than 5 continuous hours without an interval of at least three-quarters of an hour for a meal. The new legislation of 1936 established a 40-hour week, an 8-hour day, and 4¼ hours as a maximum period of uninterrupted labor. Exceptions for special cases are obtainable from the Court of Arbitration. Special provisions are made covering conditions in dairies and laundries, but the hours in laundries are the same as for industry generally. In all, 15 industries are exempt from the maximum hours provisions, 9 under the Factories Act, and 6 under the Finance Act of 1936.

Minimum wages prescribed by the statute amount to 15 shillings per week, with half-yearly increments of at least 4 shillings per week, up to a maximum weekly pay of £2 per week. Holiday pay is required. Overtime pay is one and one-half times the hourly rate except on Sundays, when the rate is doubled and must be at least 1 shilling 6 pence per hour. The factories law, like the arbitration legislation, provides that wages may not be reduced because of the reduction in the working week. The burden of proof that wage reductions or dismissals are not made in contravention of this provision rests on the employer.

SHOPS AND OFFICES ACT

Shop and office employees were first granted special protective legislation in 1892, and again no control of hours was established in the original legislation. This law has been amended many times and the principal amendments extended coverage to office workers and office assistants. As regulation developed, hours of labor and opening and closing hours of offices and shops were prescribed. Many exemptions are authorized and although the basic legislation of 1921–22 is still in force it has relatively little significance because of the extent to which awards of the Court of Arbitration apply to shop and office employees.

Provisions of the Shops and Offices Act relative to hours were liberalized in 1936, when the 44-hour week, 8-hour day, and 4¼-hour uninterrupted stretch of service were inaugurated. The amendment also permits an 11-hour day once a week in shops and 5 hours of uninterrupted service within certain limitations, provided this does not conflict with other legislation. Both offices and shops must close at 12 noon instead of 1 p. m. on Saturday.

The minimum wage rate is the same as under the Factories Act, that is, 15 shillings per week to be increased by 4 shillings at the end of each 6 months until the maximum of £2 is reached. Wages may not be reduced when hours are curtailed to conform with the requirements.

Special provisions are made for the time of starting work for occupations such as milk delivery, where custom makes it necessary. Hotel and restaurant employees are subject to the same provisions as shop and office employees in general. Bank and insurance-office employees are no longer exempt from the maximum hours. The minimum-wage provisions now apply to office assistants as differentiated from office workers and to employees of lawyers and mining-company offices. However, exceptions are still allowed for some classes of workers.

AGRICULTURAL WORKERS' ACT OF 1936

Legislation enacted in 1936 to establish working standards for agricultural labor greatly extends protection of farm employees. Earlier legislation, which was repealed when the 1936 law became effective, provided for the comfort of laborers who were lodged by their employers, and a few groups were covered by awards and agreements. The present act extends the lodging requirements, but its principal provisions deal with wages and paid vacations. Hours were not established as this was considered impracticable.

Only dairy-farm labor was covered by the law, but its terms were designed so that other classes of farm labor will be included as occasion arises and sufficient information and experience make it practicable. Extension is authorized by order-in-council to be issued by the Governor-General. Three extension orders were issued in 1937 blanketing in orchard workers; agricultural and pastoral workers engaged in commercial production of wool, meat, and/or grain; and agricultural workers engaged in the commercial production of grain, including seed, unless covered by award or agreement.

The minimum wages established for dairy workers under the law were based on an adaptation of the adjustable scale introduced in 1928 for shearers and wool-shed hands. (See p. 290.) Temporarily, the law established the rates of pay for workers of different age groups, pending an order-in-council whereby the rates were linked to changes in the guaranteed prices of dairy products.

MINIMUM WAGE RATES AND SCHEDULED HOURS IN TWO AUSTRALIAN CITIES, 1937

STATISTICS showing the minimum wage rates and scheduled hours for a number of industries and occupations in Sydney and Melbourne, Australia, are shown in the following table. This information was collected by the Commonwealth Bureau of Census and Statistics of Australia and represents the wages and hours schedules established by awards, determinations, and agreements in force on December 31, 1937.¹ With the exception of the statistics for woolen mills covering woman workers, as noted in the table, the wage rates and hours apply to adult male workers.

Minimum Wage Rates and Scheduled Hours of Labor for Adult Workers¹ in Sydney and Melbourne, Australia, Dec. 31, 1937
[Shilling at par=24.3 cents and penny=2 cents]

Industry and occupation	Sydney		Melbourne	
	Weekly wage rate	Hours per week	Weekly wage rate	Hours per week
<i>Wood, furniture, sawmill, etc.</i>				
Coopering: Coopers.....	s. d. 111 0	48	s. d. 120 0	44
Furniture:				
Cabinetmakers.....	104 0	44	99 0	44
Chairmakers.....	104 0	44	99 0	44
French polishers.....	104 0	44	99 0	44
Wood carvers.....	104 0	44	99 0	44
Wood machinists.....	104 0	44	84 0 to 99 0	44
Sawmilling and timber yards:				
Box and case makers.....	91 0	46	90 0	46
Laborers.....	78 0	46	77 0	46
Machinists:				
Bolt carvers.....	102 0	46	101 0	46
Molders.....	84 0 to 99 0	46	83 0 to 98 0	46
Planers.....	88 0 to 97 0	46	87 0 to 96 0	46
Shapers.....	102 0	46	101 0	46
Ordermen.....	91 0	46	90 0	46
Sawyers:				
Band or jig.....	92 0 to 105 0	46	91 0 to 104 0	46
Circular.....	92 0 to 99 0	46	91 0 to 98 0	46
Tallymen.....	83 0 to 91 0	46	82 0 to 90 0	46
<i>Engineering, metal works, etc.</i>				
Boilermaking:				
Boilermakers.....	108 0	44	107 0	44
Helpers.....	87 0	44	86 0	44
Laborers.....	87 0	44	86 0	44
Brassworking:				
Finishers.....	96 0 to 105 0	44	95 0 to 105 0	44
Molders.....	87 0 to 108 0	44	86 0 to 107 0	44

¹ Male workers except where otherwise specified.

¹ Australia. Commonwealth Bureau of Census and Statistics. Mimeographed report, May 19, 1938. Canberra, 1938.

Minimum Wage Rates and Scheduled Hours of Labor for Adult Workers in Sydney and Melbourne, Australia, Dec. 31, 1937—Continued

Industry and occupation	Sydney		Melbourne	
	Weekly wage rate	Hours per week	Weekly wage rate	Hours per week
<i>Engineering, metal works, etc.—Continued</i>				
Electrical installation:	s. d.		s. d.	
Armature winders.....	114 0	44	107 0	48
Fitters.....	114 0	44	107 0	44
Linemen.....	108 0	44	100 0	48
Mechanics.....	108 0	44	104 0	48
Wiremen.....	108 0	44	100 0	44
Electrical supply:				
Armature winders.....	114 0	44	107 0	48
Instrument makers.....	114 0	44	107 0	48
Linemen.....	108 0	44	100 0	48
Shift electricians.....	114 0	44	{ 101 0 } 107 0	48
Engineering:				
Blacksmiths.....	109 0	44	108 0	44
Brass finishers.....	108 0	44	{ 95 0 } 105 0	
Coppersmiths.....	108 0	44	108 0	44
Fitters.....	108 0	44	107 0	44
Laborers.....	78 0	44	77 0	44
Patternmakers.....	117 0	44	116 0	44
Shapers.....	105 0	44	107 0	44
Strikers.....	{ 87 0 } 89 0		{ 86 0 } 88 0	44
Turners.....	105 0	44	107 0	44
Molding (iron):				
Core makers.....	{ 87 0 } to 108 0	44	{ 86 0 } to 97 0	44
Laborers.....	87 0	44	86 0	44
Molders.....	{ 87 0 } to 108 0	44	{ 86 0 } to 107 0	44
Molding (steel):				
Core makers.....	108 0	44	107 0	44
Laborers.....	87 0	44	86 0	44
Molders.....	108 0	44	107 0	44
Sheet-metal working:				
Canister makers.....	84 6	44	{ 85 0 } 89 0	44
Machinists.....	{ 84 0 } to 90 6	44	87 0	44
Solderers.....	{ 84 0 } to 88 6	44	{ 85 0 } 89 0	44
Tinsmiths.....	98 6	44	{ 97 0 } 105 0	44
<i>Clothing, hats, boots, etc.</i>				
Bootmaking: Bootmakers.....	97 0	44	97 0	44
Tailoring (ordered):				
Cutters.....	106 0	44	106 0	44
Pressers.....	96 0	44	96 0	44
Tailors.....	96 0	44	96 0	44
Tailoring (ready-made):				
Cutters.....	99 0	44	99 0	44
Pressers (coat).....	96 0	44	96 0	44
Tailors.....	96 0	44	96 0	44
Trimmers.....	96 0	44	96 0	44
Textile-working (woolen mills):				
Carders.....	81 0	44	79 0	44
Dyehousemen.....	82 6	44	79 0	44
Laborers (general).....	81 0	44	79 0	41
Scourers.....	81 6	44	84 0	44
Spinners.....	82 0	44	79 0	44
Turners.....	{ 85 0 } to 96 6	44	{ 80 0 } to 96 0	44
Warpers.....	86 6	44	81 0	44
Comb minders, female.....	47 0	44	42 0	44
Drawers and menders, female.....	{ 50 0 } 56 0	44	{ 42 0 } to 48 0	44

Minimum Wage Rates and Scheduled Hours of Labor for Adult Workers in Sydney and Melbourne, Australia, Dec. 31, 1937—Continued

Industry and occupation	Sydney		Melbourne	
	Weekly wage rate	Hours per week	Weekly wage rate	Hours per week
<i>Clothing, hats, boots, etc.—Continued.</i>				
<i>Textile-working (woolen mills)—Continued.</i>				
	<i>s. d.</i>		<i>s. d.</i>	
Warpers, female.....	{ 51 0 } 56 0	44	{ 44 0 } 45 0	44
Weavers (loom), female.....	56 0	44	45 0	44
Gillbox minders, female.....	47 0	44	42 0	44
Others, female.....	47 0	44	42 0	44
Underclothing, female.....	{ 42 0 } to 56 6	44	{ 42 6 } to 56 0	44
<i>Building</i>				
Bricklayers.....	{ 118 0 } 123 6	44	{ 116 5 } 125 9	44
Carpenters.....	118 0	44	109 6	44
Laborers:				
Bricklayers.....	84 0	44	83 0	44
Carpenters.....	84 0	44	83 0	44
Concrete workers.....	84 0	44	83 0	44
Earth excavators.....	84 0	44	83 0	44
Gear workers.....	84 0	44	83 0	44
Scaffold hands.....	84 0	44	83 0	44
Masons (stone).....	125 6	40	106 11	44
Painters.....	111 4	44	103 2	44
Paperhangers.....	111 4	44	103 2	44
Sign writers.....	118 8	44	{ 99 0 } 106 4	44
Plasterers.....	{ 118 0 } 123 6	44	{ 110 11 } 123 9	44
Plumbers.....	122 0	44	114 8	44

Social Security

EMPLOYEES' RETIREMENT SYSTEMS IN GREAT BRITAIN

THE extent to which employers in Great Britain have voluntarily adopted systems for the payment of pensions to their employees upon their retirement from work was the subject of a recent inquiry¹ by the Ministry of Labor. These systems are independent of the national old-age pension scheme. The study was limited to schemes which provide for the payment of pensions toward the cost of which employers contribute, and did not include plans under which pensions are paid at the discretion of the employer, those in which no direct contribution is made by the employer, or those which provide only for a lump-sum payment on retirement without any option as regards an annuity or pension. The inquiry was sent to all employers throughout the country who were known or believed to have such systems, with the exception of Government departments and local authorities, and the desired information regarding the operation of the systems was secured in all but a few instances. The returns covered industrial and commercial enterprises and numerous other organizations and institutions, such as hospitals, nursing associations, and certain classes of educational establishments which are not covered by the Teachers' Superannuation Acts.

It was found that 6,544 employers were contributing to retirement-pension schemes for their employees. In 4,944 instances the plan applied exclusively to administrative, professional, clerical, or sales staffs, while in 1,600 cases manual wage earners were covered. The total number of persons employed by these firms was considerably over 3 million, while the number of employees covered by the pension schemes was 1,617,093, of whom 802,635 were in the salaried classes and 814,458 were manual wage earners. Included in the plans were 37 group schemes covering 4,144 firms or undertakings, while 2,580 plans were operated by the industrial establishments either directly or through insurance companies. Among the principal group schemes were those established for wage earners by the joint industrial councils for the flour-milling and wallpaper industries, a federated scheme for nurses and hospital officers, a federated system for the teaching

¹ Ministry of Labor Gazette, London, May 1938, p. 172.

and administrative staffs of universities, and systems covering foremen, clerks, etc., in engineering, shipbuilding, and other establishments. Although the number of employers contributing to the 37 group schemes was considerably larger than the number operating individual schemes, the number of employees covered by the latter group was 1,544,975 while the number covered by the group schemes was only 72,118. This was due to the fact that many of the group schemes applied only to particular grades or classes of employees, while a large proportion of the firms and enterprises with individual schemes employed large numbers of workers and had included wage earners as well as salaried employees in the system.

The pension systems were operated directly by the firms through establishment funds contributed by employers alone or employers and employees, or through insurance companies. The larger part of the plans were of the latter type, but over four-fifths of the total number of employees covered were members of schemes which were financed by funds administered by the establishment.

In all the pension systems covered by the study, employers contributed all or part of the cost of the pensions; 1,003,475 employees out of the 1,617,093 covered by the schemes also contributed. An analysis of the number of employees covered by the contributory and noncontributory schemes shows that a higher proportion of salaried employees than of wage earners paid contributions; 70 percent of the administrative, clerical, sales, etc., staffs contributed to the pension costs, while slightly more than half of the wage earners paid contributions. The systems under which no contributions were required of employees were in nearly all cases operated by the individual enterprises and were financed by establishment funds. There was no uniformity in the amounts of the contributions or the pensions paid, but in general the contributions of the salaried employees ranged from 2 percent to 5 or 5½ percent of the salary, although older entrants might pay a higher rate. For wage earners the usual contribution ranged from 1s. to 2s. per week for males and from 6d. to 1s. 6d. for females. In some cases the contribution was as low as 3d. per week for both sexes. Aside from the cases in which the whole cost was borne by the employer, the employer's contribution usually equaled the total contributions of the employees.

The following table shows the number of employers who were operating pension schemes or contributing to group schemes at the end of 1936 and the number of employees covered, by main groups of industries or services.

Number of Employers with Pension Schemes in Great Britain, and Number of Employees Covered, at the End of 1936, by Industry or Service

Industry or service	Number of employers		Number of employees covered		
	Total	Schemes for manual wage earners ¹	Total	Administrative, clerical, sales, etc., staffs	Wage earners
Total.....	6,544	1,600	1,617,093	802,635	814,458
Mining and quarrying.....	45	7	10,710	7,075	3,635
Brick, pottery, glass, cement, etc.....	22	17	25,503	4,618	20,885
Chemical, paints, oils, soap, etc.....	101	77	74,783	37,908	36,875
Metals, engineering, and shipbuilding.....	1,429	156	177,505	77,942	99,563
Textiles.....	93	49	116,574	13,626	102,948
Clothing.....	20	17	14,627	4,808	9,819
Food, drink, and tobacco.....	218	191	116,556	26,151	90,405
Woodworking, furniture, etc.....	27	23	3,176	799	2,377
Paper, printing, etc.....	168	143	51,074	14,675	36,399
Building and public-works contracting.....	21	10	3,458	1,266	2,192
Gas, water, and electricity.....	141	126	80,745	17,716	63,029
Transport and communication.....	115	49	334,158	117,059	217,099
Distributive trades.....	371	184	114,975	77,401	37,574
Cooperative societies.....	309	309	181,345	131,195	50,150
Insurance, banking, and finance.....	702	29	216,041	212,391	3,650
Hospitals, nursing associations, etc.....	1,602	13	20,120	19,472	648
Educational institutions.....	249	63	13,440	10,764	2,676
Other professions, societies, institutions, etc.....	509	20	9,950	9,578	372
Laundries, dyeing, and cleaning.....	37	25	8,429	1,170	7,259
Other.....	365	92	43,924	17,021	26,903

¹ Included in previous column; in majority of cases salaried staffs also covered.

There were found to be many methods of determining the pension, one of the most common being to multiply a given fraction of the average salary over a certain period by the number of years of service. In some cases the amount of the annuity was fixed and contributions were graded accordingly; in other cases the pension varied, on actuarial principles, according to the amount of the contribution and the length of time over which the contributions had been paid. In a large number of cases the contributions were graded by salary or wage groups, and the pension was calculated on the basis of £1 per year for each shilling of weekly contribution multiplied by the number of years of service for which contributions had been paid. For example, a contribution of 2s. a week for 40 years would secure a pension of £80 a year. Flat weekly or yearly rates of pensions were fairly common, the pensions under such plans usually amounting to from 15s. to 30s. or £2 a week. Certain options, such as a reduced pension on the joint lives of the retiring employee and his wife to be continued until the death of the last survivor, were allowed in some instances; a cash option was sometimes given, usually applying only to the amount contributed by the employee. A large number of the plans guaranteed the payment of the pension for a minimum number of years, whether the pensioner survived or not, the balance in such cases being paid to the dependents. The usual guaranteed period was 5 years, or rather less frequently, 3 years.

In many of the establishment funds a minimum length of service was required in order to qualify for a pension, the period varying from 10 to 20 years. The minimum age for entry into the system was usually 18 to 21 years, the maximum, where one was fixed, rarely being under 50 or 55 years. Provision had also been made in most systems for compensating for service rendered before the adoption of a pension arrangement, in order to insure the older employees an adequate pension on retirement. The majority of the contributory pension schemes, while optional for persons already on the pay roll when the scheme was adopted, were compulsory for new employees. In a few cases membership was compulsory for certain classes of employees only, while in rather more than one-fourth of the contributory systems, membership was optional for all employees.

Information was secured regarding the normal pension age in plans covering 1,418,327 employees, or about 88 percent of all the employees covered. For men, the normal pension age of salaried workers was usually from 60 to 65 years, with 65 fixed for 52.4 percent of those covered, and for women in the same group the retirement age ranged in the majority of cases from 55 to 65 years, 37.2 percent of the women covered being allowed to retire at 55 years or under, 18.5 percent at 60 years, and 33.2 percent at 65 years. The retirement age of wage earners was fixed at 65 for the majority of the men (83.2 percent), while among women 14.2 percent were allowed to retire at 55 years or under, 24.2 percent at 60 years, and 47.4 percent at 65 years. Compulsory retirement at specified ages was in effect in 1,069 of the individual pension plans covering 781,900 employees. The age of compulsory retirement was fixed at 65 for 79 percent of the employees covered, the retirement ages for the remainder ranging from under 55 to 70.

It was estimated, on the basis of the returns received from about 80 percent of the employers, that the total number of persons, exclusive of those formerly employed in the national and local government services, who were receiving pensions at the end of 1936 was from 80,000 to 90,000.



SICKNESS INSURANCE IN THE SOVIET UNION¹

THE Soviet social-insurance system is based on a series of decrees issued following a proclamation of the Soviet Government on November 12, 1917, 5 days after the overthrow of the provisional government and the taking over of power by the Soviets. This proclamation proposed to establish an insurance system, for the working class of Russia and the poorer classes of the urban and rural population, which

¹ Data are from report by Loy W. Henderson, first secretary of the American Embassy, Moscow, March 15, 1938.

would provide benefits in all cases of incapacity arising from sickness, accident, and invalidity, and in cases of orphanage, widowhood, old age, or loss of the breadwinner; would make employers the sole contributors to the social-insurance fund; and would provide for the administration of insurance funds by the insured through their respective organizations. The first of the decrees, issued November 16, 1917, ordered that all medical facilities of enterprises and establishments should be turned over to so-called insurance soviets for the purpose of rendering free medical aid to the workers and employees.²

The system established by this and subsequent decrees has undergone various revisions. In October 1930, unemployment benefits were abolished by a resolution of the Commissariat of Labor, "in view of the great shortage of workmen in all branches of national economy." Also, according to the present Soviet constitution, ratified December 5, 1936, citizens of the U. S. S. R. have the right to work, and theoretically, therefore, there is no unemployment in the Soviet Union. The most recent important amendment to the social-insurance laws was made in March 1937 by a resolution of the Soviet of People's Commissars, which provided for changes in the activities of the social-insurance agencies and in the dues paid by employers.³ The resolution relieved the labor unions,⁴ which are administrators of the social-insurance fund, of all expenses connected with health protection, maintenance of hospitals and medical institutions, housing construction, and the payment of pensions to nonworking invalids. The labor unions are instructed, however, to cooperate with the State agencies in improving conditions in hospitals, clinics, maternity homes, etc. The dues collected by the labor unions from the enterprises range from 3.7 to 10.7 percent of the total monthly pay roll. The rates are fixed for 121 industrial groups and in general are higher for the more hazardous occupations. The Soviet of People's Commissars approved a resolution of the All-Union Central Soviet of Labor Unions on August 31, 1937, providing that workers in enterprises not of an industrial nature shall receive the same benefits in case of sickness and temporary incapacity as workers in industrial enterprises. The social-insurance budget and the amount of contributions from the State enterprises, or in rare cases a private individual employing office workers or domestic servants, are determined by the All-Union Central Soviet of Labor Unions and go into effect upon approval by the Soviet of People's Commissars.

² Until recently the word "worker" meant a person engaged in manual work. All others were "employees." This distinction is tending to disappear and all persons working for hire are now generally designated as "tollers."

³ All institutions and enterprises including cooperative and so-called public institutions are owned and operated by the State, and private employers in the Soviet Union are limited to a few foreigners engaged principally in journalism and business.

⁴ The Soviet labor unions are organizations under the direct control of the State. The People's Commissariat for Labor was abolished and its functions were taken over by the All-Union Central Soviet of Labor Unions in 1933.

As it stands today, the social-insurance system in the Soviet Union is fundamentally different from the systems in other countries. Since industrial, commercial, educational, cultural, or other enterprises and institutions are owned and operated by the Government either directly or through Government-controlled cooperatives, labor unions, and public organizations, social insurance is entirely a State function. The benefits provided by the social-insurance system are also different from those in effect in other countries. In addition to the cash and medical benefits, the fund is also used for building, equipping, and operating nurseries, summer camps, sanatoria, rest homes, tourist homes, sport stadia, "parks for culture and rest," etc. Between one-half and two-thirds of the fund is used for the more strictly insurance benefits, the remainder being used for the recreation and cultural features. This latter sum, together with additional appropriations by the Government of the Union, is disbursed among the health, education, and social-security commissariats of the constituent republics.

Coverage of System

All workers and employees of State, cooperative, public, or private establishments and enterprises (including foreigners), domestic servants, students receiving stipends, and students in professional courses receiving allowances or wages from the places of previous employment are covered by the system. There is no age limitation. Persons who have no regular employment, collective farmers (*kolkhozniki*), and individual farmers who comprise about 60 percent of the population are excluded from the system.

Benefits

Cash benefits for sickness, funeral expenses, and free medical treatment are extended to all insured persons irrespective of age or earnings, but medical service is given only at the clinic of the place of employment of the insured person or of the district in which he resides. Payments for layettes and nursing allowances are limited to insured persons whose monthly earnings⁵ do not exceed 300 rubles.

Full wages or salaries are payable from the first day of sickness (except when sickness is due to intoxication) until recovery or until an invalidity pension is granted, to workers who have been employed for at least 2 years in one enterprise and whose total service period exceeds 3 years; to "shock" workers and Stakhanovites (exceptionally efficient workers) who have a service period of at least 1 year; to doctors, medical assistants, educators, and agricultural and animal-breeding experts in rural districts, provided they have worked in a

⁵ The average wage of Soviet "white-collar" workers is about 237 rubles a month and of an unskilled laborer about 90 rubles per month. The internal purchasing power of the ruble is about 5 American cents.

given locality for at least 2 years and their total service period is over 3 years; and to all persons under 18 years of age (children under 16 are not allowed to work), provided they have worked in one enterprise for at least 1 year.

Three-fourths of the wage or salary is paid during the first 20 days of illness and full wages thereafter to workers who have been in the same employment for 2 years but whose total service period is less than 3 years; to miners, locomotive drivers, and construction workers (seasonal workers excluded) who have been in the same employment for more than 1 year but less than 2 years; to all persons under 18 years of age who have worked for less than 1 year.

Two-thirds of their wages during the first 20 days of illness and full wages thereafter are paid to persons who have worked at the same employment for more than 1 year but less than 2 years; and to miners, locomotive drivers, and construction workers (seasonal workers excluded) whose whole service period is less than 1 year. All other persons who have worked less than 1 year in a given establishment are entitled only to two-thirds of their wages during the whole period of incapacity. Employed persons who are not members of a labor union receive one-half of their wages for the first 30 days of illness and two-thirds thereafter if employed in State enterprises, and one-half of their wages for the entire period if in private employment. Insured labor-union members in private employment receive two-thirds of their wages for the first 20 days of incapacity and full wages thereafter if they have been union members for at least 1 year; and if members for less than 1 year, two-thirds of wages for the duration of incapacity.

Until the law of July 31, 1937, office employees in general received three-fourths of their salary for the first 15 days of illness and full salary thereafter. Now office employees receive their full salaries from the first day and for the duration of incapacity. The maximum rate of sickness benefit of 300 rubles per month has been abolished.

Seasonal workers are entitled to temporary-incapacity relief only in case of accident or occupational disease and if employed for at least 3 months in the previous year or 10 months in the preceding 2 years. Insured persons who work at home are entitled to benefits only if the material they work with is furnished by their employer and if they do not employ help.

Cash benefits are not payable in cases of sickness willfully contracted, malingering, failure to follow the orders of the physician, or refusal to submit to medical examination. Persons whose incapacity is due to intoxication or injuries resulting therefrom do not receive benefits for the first 5 days, and afterward only one-half of the usual benefit is paid, unless such persons have dependents.

Maternity benefits.—All insured women are entitled to compensation for 8 weeks before and 8 weeks after childbirth at the same rate as for sickness. An allowance for the purchase of clothing for the infant, amounting to 45 rubles, and a nursing benefit of 90 rubles are paid if the wages of the parents do not exceed 300 rubles a month; others receive these allowances if they meet the requirements as to length of service. These allowances are increased proportionately in cases of multiple births.

Funeral benefits.—Funeral benefits are paid to the family of an insured person in the case of death, or to the insured person in the case of death of a dependent member of the family. In cities, the sum of 40 rubles is paid for the burial of a person over 10 years of age and 20 rubles for a child under 10 years. In rural districts the grants are 20 and 10 rubles, respectively.

Medical benefits.—Medical benefits include free medical attendance and care, and dental treatment. Free pharmaceutical aid was abolished about 1933, but the cost of such medicines as are obtainable in the public pharmacies is relatively low. In case of sickness the insured person may apply for free medical consultation at the dispensary where he is employed or in the district where he resides, but if medical aid is obtained elsewhere, a fee must be paid. If dispensary treatment proves insufficient, the attending physician may send the patient to a hospital or to an expert joint medical labor commission which is authorized to recommend an invalidity pension, transfer the insured to easier work, direct the insured to another town for special treatment, etc. Only dispensary physicians and expert commissions are authorized to issue the disability certificates to the insured which are required for the payment of benefits. Privately engaged physicians cannot issue such certificates.

Sanatoria, health resorts, and rest homes provide special and preventive treatment for a limited number of persons each year. Certificates entitling the holder to free board, lodging, and medical care in a sanatorium or rest home for a specified period are issued by local labor-union organizations. Preference is given to party leaders, high officials, and Stakhanovites irrespective of the duration of their work in a given enterprise. Other workers are theoretically entitled to such certificates only if they have worked in the same place of employment for at least 2 years and have a total service period of not less than 5 years. Labor-union members are given preference over non-unionists. The costs of sanatorium care are paid from the social-insurance fund by the labor unions, but persons sent to rest homes are required to pay 20 percent of the cost. In certain cases benefits covered by the social-insurance fund are supplemented by the State. In 1936, following the issuance of the law prohibiting abortions, a special sum of 1,481,300,000 rubles was appropriated for the purpose

of establishing new maternity homes, nurseries, kindergartens, etc., and enlarging the old ones and of establishing allowances for mothers of 7 or more children.

The number of sanatoria and health resorts belonging to labor unions increased from 94 in 1933 to 216 in 1937, and rest homes from 305 to 621. In 1936 about 413,500 persons were sent to sanatoria for special treatment and 1,500,000 insured persons spent their vacations in rest homes. In the 5 years ending in December 1932 about 226 million rubles were spent from the social-insurance fund for the building of new rest homes and sanatoria and in the 5 years ending in 1937, the amount is estimated to have exceeded half a billion rubles.

Contributions

All contributions to the social-insurance fund are made by the employers from funds which they are obliged to maintain for social and cultural purposes and no deductions therefor may be made from the wages of insured persons. The management of each State, cooperative, public, or concessionary enterprise and institution (of which there are several hundred thousand in the Soviet Union) is regarded as the legal employer, although the individuals composing the management are also covered by the social-insurance system. Each enterprise and institution is registered under the auspices of one or several labor unions, which see to it that the insurance dues are paid regularly and in full. The payments are transferred to the current account of the central committee of the respective labor unions in the local branch of the State Bank, and in turn are paid to the All-Union Central Soviet of Labor Unions in Moscow, which draws up the social-insurance budget. Payment of contributions for insurance of domestic servants is made by purchase of stamps which are affixed to cards, one of which is held by the employer and one by the insured person.

Statistics of Operation

In 1936, employing enterprises contributed to the social-insurance fund of the Union a total of 11,843,000,000 rubles. Of this amount 8,380,000,000 rubles remained in the fund administered by the labor unions for the payment of cash and medical and related benefits. The rate of contributions by employing enterprises was reduced in March 1937 by a resolution of the Soviet of People's Commissars, and the contribution for the year, it was estimated, would amount to 5,292,000,000 rubles.

The following table shows the number of insured persons in the Soviet Union and the contributions to the sickness-insurance fund for the years 1926 to 1937. There are no figures available showing the total number of beneficiaries or the number receiving the different types of benefits.

TABLE 1.—*Number of Insured Persons and Sickness-Insurance Contributions in the Soviet Union, 1926-37*

Year	Number of insured persons	Contributions	Year	Number of insured persons	Contributions
		<i>Rubles</i>			<i>Rubles</i>
1926.....	8,186,000	703,400,000	1932.....	22,385,300	4,400,800,000
1927.....	9,030,000	923,200,000	1933.....	22,156,300	4,794,800,000
1928.....	9,865,400	1,050,200,000	1934.....	23,934,600	5,859,800,000
1929.....	10,932,200	1,258,900,000	1935.....	24,948,700	7,157,000,000
1930.....	13,469,700	1,660,600,000	1936.....	25,630,000	8,380,000,000
1931.....	17,658,400	2,849,500,000	1937.....		¹ 5,292,000,000

¹ Estimated.

Table 2 shows the total expenditures from the social-insurance fund for maternity benefits, layettes and nursing benefits, and other expenditures for the welfare of children (playground, nurseries, summer camps, child sanatoria).

TABLE 2.—*Expenditures of the Social-Insurance Fund in the Soviet Union for Various Types of Maternity Benefits, 1931-37*

Year	Cash maternity benefits	Average daily benefit	Layettes and nursing benefit	Other benefits for children
	<i>Rubles</i>	<i>Rubles</i>	<i>Rubles</i>	<i>Rubles</i>
1931.....	58,600,000	2.59	52,000,000	6,600,000
1932.....	81,700,000	2.86	70,100,000	18,400,000
1933.....	83,700,000	3.43	63,500,000	35,400,000
1934.....	110,200,000	3.93	57,600,000	53,400,000
1935.....	213,500,000	4.69	83,300,000	80,500,000
1936.....	376,300,000	5.65	148,300,000	112,600,000
1937.....	¹ 822,000,000	¹ 7.26	¹ 323,000,000	¹ 208,100,000

¹ Estimated.

In addition to the sums spent from the social-insurance fund the Government allotted 200,000,000 rubles in 1936 for the payment of sickness benefits; in 1937 it not only relieved the social-insurance fund of expenses connected with the payment of invalidity pensions, the building and upkeep of hospitals, clinics, maternity homes, nurseries, kindergartens, etc., but also contributed 1,481,300,000 rubles for the welfare of mothers and children.

Settlement of Disputes

Complaints of insured persons in regard to refusal, miscalculation, or delay in the payment of cash benefits are handled by the local labor-union committees. The decision of the local labor union may be appealed to the next highest labor-union organization, which renders final judgment.

Administration

The social-insurance system is administered by the Government-controlled All-Union Central Soviet of Labor Unions through its constituent republic, district, and local organizations. All members of the social-insurance administration are themselves covered by the system.

Women in Industry

EARNINGS AND HOURS OF WOMEN IN KENTUCKY, 1937

AVERAGE (median) earnings of women in Kentucky in a week in the fall of 1937 ranged from \$8 or \$9 in hotels and restaurants, where wage supplements were common, to \$14.40 in ready-to-wear stores. Factory workers earned an average of \$13 per week. While normal working hours varied considerably in the different industries, over one-half of the women covered by a survey of the United States Women's Bureau, from which these data were taken, worked on a schedule of 40 hours or less. The survey covered the earnings and hours of work of women employed in 359 establishments in 33 cities and towns, and was made by the Women's Bureau preliminary to the enactment of the minimum-wage law of the State that has recently gone into effect. Of the 21,819 women employed in these establishments, 68 percent were in factories, 17 percent in stores, 8 percent in laundries, 7 percent in hotels and restaurants, and 1 percent in dry-cleaning establishments. Almost three-fifths (59 percent) of the workers were employed in Louisville.

Hours of Work

There was a considerable range in the scheduled or normal working hours in the separate industries. Although under the law a 60-hour week was permissible, very few of the women had so long a scheduled week, and but 15 percent had a longer week than 48 hours; over half (53 percent) worked on a schedule of 40 hours or less.

An 8-hour day and 40-hour week were the most common in factories, almost three-fifths of the factory workers having a 5-day week. Nearly two-thirds of the women working in store restaurants had a week of 40 hours or less. The hotel and restaurant group and laundries and dry-cleaning establishments had the longest scheduled hours, 48 or more. More than a third of the women in independent laundries and dry-cleaning establishments, however, had a week of over 44 but under 48 hours. The most common week in stores was 45 and under 48 hours.

The actual hours worked by considerable numbers of women were, however, shorter than those scheduled. Even in laundries, where

the prevailing scheduled week was the longest (48 hours or more), only about three-tenths, and in dry-cleaning establishments slightly more than one-half, of the women worked these scheduled hours. Almost one-half of the factory workers and over three-tenths of the laundry workers actually worked less than 40 hours a week.

In hotels and restaurants irregular shifts were common and the spread of hours over the workday was frequently much longer than the actual hours worked. While in hotel dining rooms and kitchens only 6 percent of the employee-days had more than 9 hours of work, 31 percent had a spread of at least 12 hours. In independent restaurants only 5 percent of the days were longer than 9 hours of work, but 27 percent extended over at least 11 hours and even as many as 16 hours in some cases.

A distribution of the women in the main industry groups according to the actual hours worked is given in table 1. Hotels and restaurants are not included, the diversity of shifts rendering figures therefor not comparable.

TABLE 1.—*Distribution of Woman Workers in Kentucky by Actual Hours Worked and by Industry Groups*

Industry group	Number of women reported	Percent of women who worked—			
		Under 40 hours	40, under 44 hours	44, under 48 hours	48 hours and over
Total.....	14, 607	39. 8	24. 0	21. 7	14. 4
Factories.....	10, 293	¹ 49. 8	² 31. 0	9. 5	9. 7
Stores (excluding part-time workers).....	2, 636	7. 4	2. 1	70. 0	20. 5
Department.....	1, 642	6. 9	2. 0	73. 6	17. 5
Ready-to-wear.....	629	9. 7	1. 7	69. 9	18. 8
Limited-price or variety.....	365	5. 2	3. 3	54. 2	³ 37. 3
Laundries.....	1, 509	⁴ 30. 7	16. 3	21. 4	⁵ 31. 5
Dry cleaners.....	169	18. 9	9. 5	17. 2	⁶ 34. 4

¹ 30.8 percent worked under 35 hours.

² 24.5 percent worked 40 hours.

³ 22.2 percent worked 48 hours.

⁴ 14.8 percent worked under 35 hours.

⁵ 23.0 percent worked 50 hours and over.

⁶ 37.9 percent worked 50 hours and over; 10.7 percent worked over 55 to 70.

Week's Earnings

Average (median) week's earnings of women in Kentucky were not high, ranging in the main industry groups from \$8 or \$9 in hotels and restaurants, where wage supplements were customary, to \$14.40 in ready-to wear stores. The ready-to-wear stores had the highest percentage (31.5) of women earning as much as \$16 and over. In factories 27 percent, in dry cleaners 24 percent, and in department stores 22 percent of the women had earnings of \$16 or more. Only 6 percent of the women in limited-price stores and 1 percent of those in laundries earned \$16 or more.

Factory workers, who formed two-thirds of the women covered by the survey, had average (median) earnings of \$13 per week. Thirty percent of them earned less than \$10 a week, and more than half of those employed in the making of wooden boxes and baskets earned less than that amount. In the food, clothing (chiefly cotton garments), and textile industries half of the women earned less than \$12 a week. Factory industries in which women had higher earnings were distilled liquors, drugs and chemicals, furniture, and printing and publishing, in which the majority earned \$14 and over, and the metal and tobacco industries, in which over half earned \$16 or more.

In the stores surveyed the regular woman employees earned an average (median) of \$13.60 a week, the highest of the main industry groups. Almost one-tenth of these women, however, earned less than \$10 and over one-fifth earned \$16 and over. By type of store, average earnings were \$12.40 for limited-price stores, \$13.70 for department stores, and \$14.40 for ready-to-wear stores.

Woman workers in laundries had average (median) week's earnings of \$9.10 and in dry-cleaning establishments of \$12.65. About one-third of the laundry workers earned less than \$8 and nearly nine-tenths less than \$12, while over two-fifths of the dry-cleaners' employees received less than \$12.

The average week's earnings of women working in hotels and restaurants (exclusive of tips and meals and lodgings) were \$8.20 in hotels, \$8.65 in independent restaurants, and \$9.15 in store restaurants. Three-quarters of the hotel employees and two-thirds of the independent-restaurant workers earned less than \$10 per week.

In addition to the cash wages, 44 percent of the women employed in hotels (mostly dining-room and kitchen workers), 75 percent of those in store restaurants, and 82 percent of those in independent restaurants received one or more meals a day. Three-fourths of the women employed in hotel dining-rooms and about two-fifths of those in independent-restaurant dining rooms were reported to have received tips. The average (median) cash earnings of such hotel employees were \$3.70 per week as compared with \$12.40 for those who did not receive tips, and of the independent-restaurant employees \$5.70 as against \$9.95 for the nonreceivers of tips. The average amount received in tips (which was reported for only 62 women in hotels and 67 in independent restaurants) was \$3.15 a week. Thirty-one percent of these women received tips amounting to \$10 or more, while 58 percent received tips of \$5 and under \$10, but only one-fourth of the latter had as high a cash wage.

Table 2 shows the average (median) week's earnings of the women covered by the survey and the proportion earning specified amounts.

TABLE 2.—*Week's Earnings of Woman Workers in Kentucky, by Industry Group*

Industry group	Number of women with earnings reported	Median earnings ¹	Percent of women with earnings of—									
			Under \$4	\$4, under \$6	\$6, under \$8	\$8, under \$10	\$10, under \$12	\$12, under \$14	\$14, under \$16	\$16, under \$18	\$18, under \$20	\$20 and over
Factories.....	11,985	\$13.00	7.0	5.4	6.8	10.6	11.9	15.9	14.9	16.0	6.6	4.8
Stores (exclusive of part-time workers).....	2,667	13.60	.6	.9	1.7	6.3	10.7	36.9	20.8	8.5	4.8	8.8
Department.....	1,671	13.70	.6	.8	1.4	3.8	11.3	37.0	23.1	9.1	5.4	7.6
Ready-to-wear.....	631	14.40	.6	1.1	1.9	2.9	7.1	33.7	21.1	9.8	5.5	16.2
Limited-price.....	365	12.40	.3	1.1	2.7	23.8	14.2	41.9	9.8	3.3	1.1	1.6
Laundries.....	1,715	9.10	4.0	7.4	20.7	34.0	20.1	10.4	2.4	.7	.1	.2
Dry cleaners.....	196	12.65	2.6	3.1	4.3	11.2	20.4	23.0	11.7	10.7	5.1	7.7
Hotels ²	3 672	8.20	19.0	12.2	15.4	26.8	10.4	9.2	4 1.0	5 4.2	-----	1.6
Independent restaurants ³	621	8.65	8.9	17.4	16.1	24.4	11.6	16.1	4 1.3	5 3.7	-----	.6
Store restaurants ³	145	9.15	15.2	3.5	24.1	13.8	20.0	18.6	4 2.8	5 2.1	-----	-----

¹ The median or midpoint, with half the earnings below and half above the amount shown.² Earnings are based on cash wages, excluding tips and allowance for lodging or meals.³ Includes 293 women employed in restaurant departments of hotels.⁴ Interval is \$14 and under \$15.⁵ Interval is \$15 and under \$20.

Hourly Earnings

Women in factories had the highest average (median) hourly earnings (35.7 cents), with those in ready-to-wear stores and department stores having the next highest—31.2 and 30.0 cents, respectively. The lowest earnings were in the laundry business—20.8 cents. Almost three-fifths of the factory workers earned 35 cents or more an hour. The proportion of women in the various industry groups earning less than 25 cents an hour was as follows: Factories, 15.3 percent; stores (exclusive of part-time workers), 14.8 percent; laundries, 77.6 percent; dry cleaners, 32.6 percent. Hourly earnings in hotels and restaurants were not available. In table 3 the median hourly earnings of woman workers in Kentucky are given by industry groups.

TABLE 3.—*Hourly Earnings of Women in Kentucky, by Industry Group*

Industry group ¹	Number of women with hours worked reported	Average earnings ² (cents)	Percent of women who earned—					
			Under 20 cents	20, under 25 cents	25, under 30 cents	30, under 35 cents	35, under 40 cents	40 cents and over
Factories.....	10,293	35.7	6.8	8.5	11.9	14.9	21.5	36.4
Stores (exclusive of part-time workers).....	2,636	29.8	5.4	9.4	37.3	27.8	8.0	12.2
Department.....	1,642	30.0	3.1	10.0	37.5	30.1	8.6	10.7
Ready-to-wear.....	629	31.2	1.9	4.3	28.6	33.5	9.7	21.9
Limited-price.....	365	26.4	21.6	15.3	51.2	7.1	2.5	2.2
Laundries.....	1,509	20.8	28.2	49.4	16.8	4.6	.8	.3
Dry cleaners.....	169	27.6	7.7	24.9	29.0	23.7	8.9	5.9

¹ Hourly earnings not computed for women in hotels and restaurants.² The median or midpoint, with half the earnings below and half above the amount shown.

Industrial Relations

INDUSTRIAL RELATIONS IN THE NETHERLANDS ¹

VOLUNTARY cooperation between employers and employees is the keystone of industrial relations in the Netherlands. Although the Government provides machinery to aid in the settlement of industrial disputes, in the majority of cases the differences are adjusted by employers and employees making use of the special bodies established by collective agreement. Freedom of association is a constitutional right and a law of 1872 legalized strikes. Strikes may be called except in certain essential and governmental services, but every effort is made to compose differences without recourse to stoppage of work. Union membership is optional, but a law adopted in 1937 makes it possible for the Government to declare applicable to an entire industry a collective agreement entered into by a majority in that industry. This provision, together with certain social-insurance allotments to unions, makes membership in a labor organization especially desirable to the workers.

Industrial Population and Organization

Of a population totaling 7,935,565 persons, 3,185,816 were engaged in gainful employment at the end of 1930, and the 1,238,912 industrial workers employed in manufacturing industries represented 39 percent of the total working population. Commerce, shipping, and agriculture are the principal national interests, but industrialization has advanced rapidly, especially since 1900. Table 1 shows the number of establishments and of persons employed in industry or trade as of 1930. The figures reflect the large part played by commerce (including wholesale and retail trade), which accounted for 23.92 percent of the total employees covered, followed by transportation and communication (including hotels and restaurants) with 16.05 percent, metal, shipbuilding, carriage construction, filament lamps, and radio goods, 11.28 percent, and foodstuffs (including beverages and tobacco products), 10.27 percent.

The average labor force per establishment was small, being less than 20 persons, except in the paper industry (24.9), earthenware (35.7), gas and electric (36.1), coal mining and peat digging (41.1), and textile, rayon, and carpet industry (61.5).

¹ Report of J. P. Moffitt, American consul at Amsterdam, January 22, 1938.

TABLE 1.—*Number of Establishments and Gainfully Employed Persons in the Netherlands, 1930, by Industry or Trade*

Industry or trade	Number of establishments	Employees	
		Number	Percent
All industries.....	414, 349	1, 875, 238	100.00
Earthenware, glassware, brick, lime.....	1, 114	39, 715	2.12
Diamonds and other precious stones.....	324	1, 750	.09
Printing and photography.....	3, 370	36, 764	1.96
Building, painting, and kindred industries.....	40, 612	155, 484	8.29
Chemical.....	2, 415	23, 822	1.27
Woodworking (cork, straw).....	10, 031	49, 453	2.64
Clothing (cleansing, hairdressing).....	28, 777	105, 043	5.60
Industrial art.....	305	968	.05
Leather, oilcloth, rubber.....	14, 822	40, 142	2.14
Coal mining, peat digging.....	1, 310	53, 794	2.87
Metal, shipbuilding, carriage construction, filament lamps, radio goods.....	27, 627	211, 606	11.28
Paper and paper products.....	744	18, 504	.99
Textiles, rayon, carpets.....	1, 335	82, 143	4.38
Gas, electricity.....	534	19, 288	1.03
Foodstuffs (including beverages and tobacco).....	23, 701	192, 588	10.27
Fishing and shooting.....	5, 195	17, 664	.94
Commerce (including wholesale and retail trade).....	178, 225	448, 538	23.92
Transportation and communication (including hotels and restaurants).....	66, 832	301, 053	16.05
Banking.....	2, 135	26, 646	1.42
Insurance.....	661	11, 259	.60
Miscellaneous.....	4, 280	39, 014	2.09

Both employers and employees have organized to a considerable degree. One of the striking features of labor organization is the custom followed whereby the group represents a particular religious or political cleavage. Such groupings are less frequent among employers.

Employer organizations.—Among employers, federations have been formed principally to defend the interests of employers against the claims of workers. Such associations are in addition to those dealing with commercial matters. Although membership is in most cases not dependent upon political or religious affiliations, there are nevertheless some important religious associations.

Trade-union organization and structure.—Membership in the six trade-union federations in 1937 was as follows: Socialist, 283,382; Catholic, 168,661; Protestant, 108,235; neutral, 44,602; independent, 11,356; and syndicalist, 1,872. Taken together, these federations represented 119 individual trade-unions. The growth in membership for certain years between 1895 and 1937 is shown in table 2.

The 142 principal industrial unions had a combined membership of 546,756 persons in December 1937, as is shown in table 3. In this table the number of unions and membership are classified by industrial groups. The metal industry alone accounted for 13 unions and 79,720 members, followed by 11 agricultural unions having 73,713 members. The building industry (68,752 persons), transport, shipping, and fishing industries (62,617 persons), factory employees (56,152 persons), and commercial and office employees (48,829 persons) were the groups having the next largest memberships. The classification in the table

indicates the presence of industrial and craft unions within a single industry. Thus, there are 18 building trades' and 5 painters' unions.

TABLE 2.—*Membership of Principal Labor Federations in the Netherlands, 1895 to 1937*

Year	Socialist		Catholic		Protestant		Neutral ¹		Independent		Syndicalist	
	Num- ber of unions	Num- ber of mem- bers	Num- ber of unions	Num- ber of mem- bers	Num- ber of unions	Num- ber of mem- bers	Num- ber of unions	Num- ber of mem- bers	Num- ber of unions	Num- ber of mem- bers	Num- ber of unions	Num- ber of mem- bers
1895.....									31	15,728		
1900.....									44	13,050		
1906.....	11	18,960							(²)	5,000		
1909.....	27	36,623							(²)	3,414		
1910.....	27	40,628	12	11,650	19	6,580			20	3,674		
1913.....	33	61,535	21	21,096	25	8,500			18	7,283		
1914.....	35	86,240	21	29,048	29	11,023			27	9,112		
1920.....	30	259,532	27	149,050	21	70,262			24	48,764		
1924.....	26	182,893	28	101,068	20	53,967			14	13,527	20	8,110
1930.....	28	255,484	24	136,610	23	72,964	30	36,434	11	17,525	8	2,748
1932.....	30	319,994	24	184,055	23	103,126	32	46,022	11	20,742	(²)	2,638
1933.....	30	336,158	24	192,655	22	115,006	29	49,180	11	22,512	9	2,828
1934.....	30	321,806	22	190,396	21	115,606	29	46,923	9	19,562	9	2,357
1935.....	30	298,553	24	180,138	21	112,613	29	46,530	8	12,956	9	2,003
1936.....	29	285,649	24	173,535	21	108,514	28	44,622	8	12,018	7	1,995
1937.....	30	283,382	24	168,661	21	108,235	29	44,602	8	11,356	7	1,872

¹ This federation was formed when 3 small organizations merged.

² Not reported.

TABLE 3.—*Number of and Membership of Netherland Trade-Unions, by Industrial Groups, Dec. 25, 1937*

Industrial group	Unions	Work- ers	Industrial group	Unions	Work- ers
All groups.....	142	546,756	Clothing.....	5	6,277
Building.....	18	68,752	Metal.....	13	79,720
Painters.....	5	11,884	Coal mining.....	3	12,930
Diamond.....	4	3,432	Technical personnel.....	8	11,369
Factory.....	9	56,152	Tobacco.....	4	12,640
Leather.....	1	4,388	Textile.....	7	27,024
Printing.....	6	20,898	Musicians.....	1	1,085
Commercial and office.....	13	48,829	Transportation, shipping, fishing.....	15	62,617
Hotel.....	3	4,229	Food.....	6	17,139
Woodworking.....	7	14,913	Agriculture.....	11	73,713
Barbers and hairdressers.....	2	1,000	Miscellaneous.....	1	7,765

Only two of the trade-union federations, the Socialist and Independent, were operating prior to 1910 and they had a combined membership of approximately 40,000 persons in 1909. In 1910 the Catholic and Protestant federations reported an enrollment of 18,230. The neutral federation was not established until 1930, three smaller federations, with 36,434 members, combined. In every federation there was a large increase in membership between the beginning of the war in 1914 and the year 1920. This was followed by a reduction in 1924, but by 1930 the number of members in the larger groups was practically the same as that of 1920. Since then higher totals have been reported, but the membership in 1937 was slightly below that of the previous year.

The majority of unions draw their membership from a variety of industries. There is, for example, a union made up of factory and transport workers. Railway and tramway employees are exceptions, having a union of their own.

Right of Association

The original constitution of 1848 recognized the right of association and assembly, and stipulated that the law should regulate and limit the exercise of this right in the interest of the public peace. This has been interpreted to accord the same rights to governmental as to private employees. Combinations of employers have the same position under the law as trade-unions.

Legal Status of Trade-Unions

A trade-union may be invested with legal personality by one of two methods: If the association is to be constituted for an indeterminate period or for a period exceeding 30 years, an act of Parliament is necessary under legislation enacted in 1855; if the period is less than 30 years, a decree of the Crown is sufficient. In both cases the rules or regulations of the association must be approved. These rules state the object, principles, sphere of activity, and the mode of organization of the association. Recognition may be refused only if it is in the public interest, and the reasons must be given. The law further provides for publishing amended rules, and the conditions of liquidation and sale of association property. Associations that are not recognized under this procedure cannot take civil action. Property of unregistered associations is deemed to be that of the persons signing contracts. The position of associations that are not registered is determined by the regulations they may establish and the general rule of civil law. In practice, unions find it advantageous to become registered, and approval by royal decree is easily obtained. Most of the unions are recognized for 29 years and 11 months, in order to avoid the necessity of obtaining parliamentary action.

Compulsion to Join Unions

Union membership is not compulsory. Membership is, however, indirectly encouraged by the State through the system of granting unemployment subsidies to organized labor and also by the new law empowering the Government to declare an agreement entered into by a majority of the trade or industry applicable to all establishments.

The law extending the coverage of collective labor agreements specifically provides that contracts may not include in their terms any provisions whereby employers or workers are forced to become mem-

bers of organizations or unions or which cause unequal treatment of organized and unorganized employers or workers. Although these principles are assured, individual bargaining loses certain advantages under the present law. Formerly an employer or employee might secure certain advantages by refusing to enter into a collective agreement, but since he may now be covered by such an agreement at the option of the Government, participation in establishing its terms may be more desirable.

Legality of Strikes and Lock-Outs

With the exception of railway employees and those in the public service, workers have the right to strike. Notwithstanding the legality of strikes, most collective agreements contain stipulations by which both contracting parties promise to refrain from any action which might lead to strikes or lock-outs during the term of the agreement.

Extent of Labor Disputes

The average annual loss of time caused by labor disputes was half a million days between 1927 and 1936 as compared with more than a million days in the years 1919 to 1925. Table 4 gives statistics of disputes, including strikes and lock-outs, by years from 1927 to 1936.

TABLE 4.—*Number, Extent, and Duration of Labor Disputes in the Netherlands, 1927-36*

Year	Number of disputes	Number of establishments involved	Number of workers involved	Working days lost
1927.....	230	748	13,500	203,900
1928.....	205	1,325	16,930	637,600
1929.....	226	1,315	21,310	984,100
1930.....	212	567	10,965	273,000
1931.....	215	974	28,213	856,100
1932.....	216	970	32,007	1,772,600
1933.....	184	876	14,807	533,800
1934.....	152	432	6,200	114,200
1935.....	152	612	12,940	262,400
1936.....	96	178	10,420	94,800

In the 10 years covered by these statistics the number of workers involved in disputes was greatest in 1931 and 1932, being 28,213 and 32,007, respectively. However, the aggregate loss in working time was relatively low in 1931 (856,100 days) as compared with 1932 (1,772,600 days). In 1929, although there were only 21,310 workers involved in strikes, the aggregate time loss was nearly a million days. Recent years (1934 to 1936) have shown a decided reduction in number of disputes, workers involved, and working days lost.

Settlement of Labor Disputes

The voluntary methods of adjusting labor disputes, provided for by joint agreement of employers and employees and incorporated in contracts to a great extent, are supplemented by governmental machinery. Under the Labor Disputes Act of May 4, 1923, disputants may have recourse to conciliation, arbitration, and a special-inquiry procedure for very important cases. Resort to the Government system of arbitration is, however, optional, as is acceptance of the decisions rendered.

JOINT INDUSTRIAL NEGOTIATION

A large proportion of the collective agreements governing working conditions contain provisions for settling industrial disputes arising in connection with their application. The details of the system adopted vary, but generally the contracts provide that both parties will refrain from any action that may lead to strikes or lock-outs during the life of the agreements. Settlement of disputes is usually provided for by arbitration, either by arbitral committees appointed for the duration of an agreement or by committees established to settle a single dispute. Regardless of whether the committees are permanent or temporary, it is customary for them to have a membership consisting of equal numbers of employer and employee representatives and an impartial chairman. Thus the usual panel has an odd number of members, three, five, seven, nine, or more, according to the size of the industry involved. Employer and worker representatives are appointed by the employer organizations and the trade-unions. These members together select the chairman.

In order to give a picture of the possible importance of provisions for voluntary settlement of disputes under the terms of collective contracts, table 5 is shown, giving the number of collective agreements and the enterprises and persons involved for selected years between 1911 and 1936. In the latest year for which figures are available 252,312 workers were covered by collective agreements, as compared with 23,002 a quarter of a century earlier.

TABLE 5.—*Number and Extent of Collective Agreements in the Netherlands, 1911-36*

Year	Number of collective agreements	Number of enterprises involved	Number of workers involved	Year	Number of collective agreements	Number of enterprises involved	Number of workers involved
1911.....	87	1,126	23,002	1931.....	1,509	23,495	259,339
1917.....	827	6,661	83,119	1932.....	1,351	21,860	252,940
1920.....	984	22,541	273,598	1933.....	1,236	23,299	244,175
1928.....	1,015	17,208	279,530	1934.....	1,164	25,629	259,495
1929.....	1,250	18,542	291,608	1935.....	1,255	26,081	210,939
1930.....	1,554	23,545	385,876	1936.....	1,229	38,761	252,312

NEGOTIATIONS WITH GOVERNMENT AID

The 1923 legislation, granting the Government power to intervene in industrial disputes provides that there shall be official conciliators and special arbitration committees to which the parties may voluntarily submit their differences, and, in important disputes involving the public interest, commissions of inquiry appointed by the Minister of Labor. Recourse to the governmental machinery is available in cases where no voluntary machinery exists or when the system provided fails to bring about a settlement.

Conciliation.—A permanent staff of Government conciliators is maintained by the Ministry of Labor to carry on their functions in every district of the Netherlands and in certain industries. When a dispute occurs which involves more than one district or industry a conciliator is named by the Minister: (1) To further peaceful settlement; (2) to consult with employers and workers in drawing up agreements; (3) to use his good offices in recommending to the parties to a dispute to apply for the intervention of a governmental board or individual conciliator or arbitrator, according to the method established by the Labor Disputes Act; (4) to name a conciliation board in appropriate cases and when requested by the parties in interest; and (5) to act as chairman or as special conciliator if requested by the employers and the workers,

Conciliators may intervene in a dispute under given conditions. These include action where a strike or lock-out may result from a dispute and affect at least 50 persons. In such cases the mayor is obliged to notify the conciliator as quickly as possible and to furnish such pertinent information as he can. The conciliator may likewise intervene on demand by the parties to a dispute which has resulted in or may cause a stoppage, if he is informed that other means of settlement have failed and the case appears sufficiently important. Thus the conciliator has a degree of latitude as to what cases he may undertake to act upon. There are, however, cases in which he may not interfere, under the terms of the law.

If a conciliator intervenes in a dispute, he has the right to subpoena the interested parties. Persons summoned are bound, on penalty of a fine, to appear in person or be represented unless they are prevented by a legitimate excuse. Within the conciliator's discretion he may recommend the parties to apply for the intervention of a conciliation board or special conciliator, and may appoint the board or individual if requested. In every instance records are kept showing the procedure and any agreement that may have been reached.

If either a special board or a conciliator is designated, such board or conciliator may require the appearance of parties to the dispute, of officials of associations on both sides, and of witnesses and experts,

under penalty of a fine. Persons so appearing are examined and given an opportunity to make a further statement on the dispute. The board or special conciliator, with the approval of the Government conciliator, may require the experts to institute a special inquiry. When a case is heard, efforts are made to bring about an immediate settlement and the outcome is recorded. If the parties fail to agree or refuse to submit a case to arbitration, the board (by a majority vote) or the individual conciliator may render an opinion on the points in dispute and communicate it to both sides. Although no power of enforcement exists, if the proffered settlement is refused, the findings may be published in whole or in part, thus influencing public opinion.

In 10 years of operation under the Labor Disputes Act, 1,000 cases were brought before the Government conciliators. Conferences were held in 400 such cases, and on the average 1 or 2 conferences were devoted to each dispute.

Arbitration.—The Government conciliator may not act in the capacity of an arbitrator, but his cooperation is required throughout arbitral proceedings and he appoints a secretary in agreement with the court or arbitrator. A person appointed to arbitrate has the right to refuse to serve; also an appointment may be challenged by either disputant.

Arbitration proceedings may be instituted directly or after conciliation has been attempted. In either case parties desiring to submit their case must apply in writing to the Government conciliator. The latter official may refuse cooperation in cases outside his competence; in cases that are not sufficiently important to justify arbitration; if the number of persons petitioning does not represent a large enough proportion of those affected; or if previous conciliation proceedings have been successful. If a case appears suitable for arbitration, the Government conciliator draws up a minute of the proceedings, to be signed by both parties, with their pledge to submit the dispute to arbitration, certain particulars concerning themselves or their representatives, and the nomination of the arbitrator or the chairman and members of the court. This document must also include a statement as to the duration and validity of the award.

Meetings of arbitrators are held as often as the chairman deems necessary. All members of the court must be present and voting when a decision is reached, and to be valid a decision must be adopted by a majority vote.

Arbitration tribunals appointed with the approval of the Government conciliator may require the appearance of the representatives of the parties to a dispute and of witnesses and experts, and may examine them in the same manner as is provided for conciliation, already described. The Government conciliator has extended powers in arbitration cases, namely, to examine persons under oath if neces-

sary and, on application of the court or arbitrator, to require the submission of books and other documents. Arbitrators and Government conciliators are bound, under pain of imprisonment or fine, to keep all matters secret which become known to them through the exercise of their arbitral functions. Minutes must be kept in every case and signed by the chairman or the arbitrator, and the secretary. Awards must be made and forwarded within 3 days thereafter to the Government conciliator, together with the minutes of the proceedings.

The Minister of Labor may, in his discretion, cancel an award and order another. He may also require revision of an award, but in neither case is the action retroactive. An award once accepted has the same force as a collective agreement.

Special inquiry.—If a dispute seriously affecting public interests is likely to cause or has caused a strike or lock-out affecting not less than 300 workers, the Minister of Labor may appoint a committee to inquire into the dispute. The Minister nominates its chairman and secretary, and may lay down the rules of procedure if he considers it necessary. Decisions reached are based on study of the circumstances of the dispute and the extent to which demands of either party may be granted. The committee is empowered to summon such witnesses and experts as it may consider necessary, and to require submission of books and other documents within a specified time limit. Committee reports are submitted to the Minister. While the conclusions are published, the report on the case may not be given out without agreement of the parties concerned or their occupational organizations.

Industrial and Labor Conditions

OCCUPATIONS OF PERSONS REGISTERED AS "TOTALLY UNEMPLOYED," 1937¹

THE HARDSHIPS of unemployment fall more heavily upon the unskilled, untrained workman, than upon the skilled, trained workman. Hardship arising from lack of skill is an increasing problem in the United States. The records of the 1937 Unemployment Census show that unskilled workmen then constituted 42 percent of all male workers unemployed, whereas the figures of the Bureau of the Census for 1930 showed that only 27 percent of all male workers at that time were classified as unskilled.

Of 5,816,975 unemployed male registrants in the recent census, 2,177,150 were classified as unskilled. This group included 677,909 farm laborers, 177,008 servants, and 1,322, 233 "other laborers", such as factory, construction, and general laborers.

In addition to the 2,177,150 unskilled laborers, a total of 1,158,309 male unemployed were classified as semiskilled.

The general classifications of male unemployed, as shown by the recent census, were as follows:

	<i>Unemployed males</i>
Unskilled workers.....	2, 177, 150
Semiskilled workers.....	1, 158, 309
Skilled workers and foremen.....	972, 878
Clerks and kindred workers.....	491, 397
Farmers.....	165, 712
Proprietors, managers, and officials (other than farmers)	90, 708
Professional persons.....	130, 633

The foregoing figures, covering unemployed males, include workers on emergency projects and cover all males unemployed from 15 to 74 years of age and able to work.

A similar story of unemployment among the relatively unskilled is shown in the tabulations concerning woman registrants. Of the 2,028,041 women registered as totally unemployed, including emergency workers, 421,191 indicated that they were "new workers"; that is that they were first job seekers, or persons who had not had recent work experience but who now wanted work. These could not be classified as to occupation. Of the classifiable balance, 35.1 per-

¹ Data are from National Unemployment Census, Washington, D. C., press release, June 27, 1938.

cent were semiskilled, 29.3 percent were clerks and kindred workers, and 23.9 percent were in the servant classes.

"This evidence of a very high ratio of unemployment among the unskilled emphasizes a real national problem," Mr. Biggers said in discussing the report. "If, as is indicated, the developments in industry call for workmen of higher skills, the obvious demand is to give more attention to proper vocational training so that the Nation may be able to utilize more easily these unemployed workmen."

Of the 7,845,016 persons who registered as totally unemployed or as emergency workers, 5,816,975, or 74.1 percent, were men, and 2,028,041, or 25.9 percent, were women.

Of the 5,816,975 unemployed males, 511,855, or 8.8 percent, indicated that they were "new workers", not classifiable as to occupation.

In addition, there were 118,333 male registrants who did not report an occupation and were therefore not classified in any specific group.

The proportion of "other laborers," of skilled workers, and of professional persons were higher among the male emergency workers than among the totally unemployed, but the proportion of male semiskilled workers was higher among the totally unemployed.

Among women who registered as totally unemployed or as emergency workers, those with occupations classified as semiskilled formed the largest single occupational group, 543,089 persons. Clerical and related occupations were given by 453,222 women, and 369,253 gave occupations classified as "servant classes." These three major groups included 88.3 percent of the unemployed female registrants, as compared with only 74.3 percent of all female workers in 1930.

Among women who registered as emergency workers a larger proportion were reported as professional persons and a much smaller proportion were reported in the servant classes than among those who registered as totally unemployed. Of the female emergency workers, 38.4 percent were classified as semiskilled, 32.0 percent as clerks and kindred workers, 13.4 percent as servant classes, and 12.0 percent as professional. Among the women who registered as totally unemployed 34.5 percent were semiskilled workers, 28.8 percent clerks and kindred workers, 26.0 percent servant classes, and 5.0 percent professional.

In table 1 the number and percent of persons registered as totally unemployed or as emergency workers are shown by sex and by occupational groups.

TABLE 1.—Persons Registered as Totally Unemployed or as Emergency Workers, by Sex and by Occupational Groups

Occupational group	Totally unemployed			Emergency workers		
	Total	Male	Female	Total	Male	Female
Number						
All registrants.....	5, 833, 401	4, 143, 194	1, 690, 207	2, 011, 615	1, 673, 781	337, 834
Registrants reporting an occupation (not including new workers).....	4, 996, 318	3, 708, 041	1, 288, 277	1, 735, 641	1, 478, 746	256, 895
Professional.....	143, 766	79, 016	64, 750	82, 313	51, 617	30, 696
Farmers (owners and tenants).....	123, 389	120, 237	3, 152	45, 720	45, 475	245
Other proprietors, managers, and officials.....	71, 614	67, 483	4, 131	24, 523	23, 225	1, 298
Clerks and kindred workers.....	739, 693	368, 650	371, 043	204, 926	122, 747	82, 179
Skilled workers and foremen.....	672, 548	666, 268	6, 280	310, 728	306, 610	4, 118
Semiskilled workers.....	1, 332, 402	887, 855	444, 547	368, 996	270, 454	98, 542
Farm laborers.....	542, 725	497, 712	45, 013	183, 288	180, 197	3, 091
Other laborers.....	898, 559	883, 922	14, 637	440, 508	438, 311	2, 197
Servant classes.....	471, 622	136, 898	334, 724	74, 639	40, 110	34, 529
Registrants not reporting an occupation.....	106, 728	66, 063	40, 665	73, 283	52, 270	21, 013
New workers.....	730, 355	369, 090	361, 265	202, 691	142, 765	59, 926
15-24 years old.....	502, 756	282, 672	220, 084	142, 669	110, 711	31, 958
25 years and over.....	227, 599	86, 418	141, 181	60, 022	32, 054	27, 968
Percent						
Registrants reporting an occupation (not including new workers).....	110.0	100.0	100.0	100.0	100.0	100.0
Professional.....	2.9	2.1	5.0	4.7	3.5	12.0
Farmers (owners and tenants).....	2.5	3.2	.2	2.6	3.1	.1
Other proprietors, managers, and officials.....	1.4	1.8	.3	1.4	1.6	.5
Clerks and kindred workers.....	14.8	9.9	28.8	11.8	8.3	32.0
Skilled workers and foremen.....	13.5	18.0	.5	17.9	20.7	1.6
Semiskilled workers.....	26.7	23.9	34.5	21.3	18.3	38.4
Farm laborers.....	10.9	13.4	3.5	10.6	12.2	1.2
Other laborers.....	18.0	23.8	1.1	25.4	29.6	.9
Servant classes.....	9.4	3.7	26.0	4.3	2.7	13.4

The number of registrants, per 1,000 gainful workers 15 to 74 years of age in 1930, is given, by sex, in table 2 for each occupation.

TABLE 2.—Registrants in Unemployment Census, 1937, Per 1,000 Gainful Workers 15 to 74 Years of Age in 1930, by Sex and by Occupational Groups

Occupational group	Unemployed, including emergency workers		Totally unemployed		Emergency workers	
	Male	Female	Male	Female	Male	Female
Registrants reporting an occupation (not including new workers).....	155	191	110	160	45	32
Professional.....	88	66	53	45	35	21
Farmers (owners and tenants).....	29	13	21	13	8	1
Other proprietors, managers, and officials.....	27	22	20	17	7	5
Clerks and kindred workers.....	102	148	76	121	25	27
Skilled workers and foremen.....	158	128	108	78	50	51
Semiskilled workers.....	214	216	164	177	50	39
Farm laborers.....	194	88	142	82	52	6
Other laborers.....	217	108	145	94	72	14
Servant classes.....	175	161	135	146	40	15

The number of persons who registered as totally unemployed and as emergency workers in the Unemployment Census of November

1937, is shown by sex, occupational group, and race in table 3, and by age groups in table 4.

TABLE 3.—Persons Registered in Unemployment Census, by Class, Sex, Occupational Group, and Race, November 1937

Class, sex, and occupational group	Totally unemployed				Emergency workers			
	Total	White	Negro	Other	Total	White	Negro	Other
Males	4, 143, 194	3, 609, 498	508, 064	25, 632	1, 673, 781	1, 453, 467	207, 331	12, 983
Professional persons	79, 016	73, 090	5, 554	372	51, 617	47, 654	3, 696	267
Farmers (owners and tenants)	120, 237	100, 406	18, 820	1, 011	45, 475	41, 966	3, 071	438
Other proprietors, managers, and officials	67, 483	65, 149	2, 193	141	23, 225	22, 354	814	57
Clerks and kindred workers	368, 650	360, 147	7, 975	528	122, 747	118, 582	3, 883	282
Skilled workers and foremen	666, 268	625, 450	38, 674	2, 144	306, 610	284, 845	20, 394	1, 371
Semiskilled workers	887, 855	809, 441	75, 418	2, 996	270, 454	240, 007	29, 076	1, 371
Farm laborers	497, 712	405, 603	85, 926	6, 183	180, 197	161, 578	16, 612	2, 007
Other laborers	883, 922	697, 842	178, 288	7, 792	438, 311	344, 333	89, 217	4, 761
Servant classes	136, 898	77, 004	58, 141	1, 753	40, 110	21, 057	18, 631	422
Occupation not reported	66, 063	48, 796	16, 801	466	52, 270	41, 782	10, 043	445
New workers	369, 090	346, 570	20, 274	2, 246	142, 765	129, 309	11, 894	1, 562
Females	1, 690, 207	1, 355, 262	328, 750	6, 195	337, 834	290, 254	45, 562	2, 018
Professional persons	64, 750	53, 135	11, 460	155	30, 696	26, 207	4, 391	98
Farmers (owners and tenants)	3, 152	1, 921	1, 215	16	245	170	72	3
Other proprietors, managers, and officials	4, 131	3, 788	330	13	1, 298	1, 214	81	3
Clerks and kindred workers	371, 043	361, 384	9, 193	466	82, 179	78, 687	3, 286	206
Skilled workers and foremen	6, 280	5, 842	419	19	4, 118	3, 872	224	22
Semiskilled workers	444, 547	383, 312	59, 435	1, 800	98, 542	83, 885	13, 947	710
Farm laborers	45, 013	25, 597	19, 185	231	3, 091	2, 035	1, 024	32
Other laborers	14, 637	9, 516	4, 979	142	2, 197	1, 372	799	26
Servant classes	334, 724	160, 879	172, 375	1, 470	34, 529	20, 195	14, 053	281
Occupation not reported	40, 665	30, 267	10, 215	183	21, 013	17, 786	3, 067	160
New workers	361, 265	319, 621	39, 944	1, 700	59, 926	54, 831	4, 618	477

TABLE 4.—Persons Registered in Unemployment Census, by Class, Sex, Occupational Group, and Age, November 1937

Class, sex, and occupational group	Total	Age group								Not reported
		15 to 19	20 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74		
		Totally unemployed								
Males.....	4, 143, 194	501, 796	712, 050	852, 743	685, 401	646, 720	496, 325	214, 083	34, 076	
Professional persons.....	79, 016	3, 353	13, 460	20, 740	14, 350	12, 687	9, 211	4, 753	462	
Farmers (owners and tenants).....	120, 237	3, 135	8, 860	22, 681	25, 827	27, 537	21, 635	9, 225	1, 337	
Other proprietors, managers, and officials.....	67, 483	895	3, 532	8, 519	13, 077	17, 175	15, 891	8, 010	384	
Clerks and kindred workers.....	368, 650	35, 097	64, 843	80, 737	65, 620	56, 115	43, 511	20, 936	1, 791	
Skilled workers and foremen.....	666, 268	20, 670	59, 141	120, 860	142, 009	150, 530	115, 496	52, 140	4, 822	
Semiskilled workers.....	887, 855	82, 141	180, 097	223, 962	155, 492	119, 537	84, 344	35, 888	6, 399	
Farm laborers.....	497, 712	74, 756	92, 009	109, 572	72, 298	67, 895	52, 981	21, 798	6, 403	
Other laborers.....	883, 922	81, 639	144, 699	180, 053	147, 574	152, 736	121, 436	47, 458	8, 327	
Servant classes.....	136, 898	13, 070	20, 193	28, 365	26, 025	23, 800	17, 001	7, 098	1, 346	
Occupation not reported.....	66, 063	17, 445	12, 136	11, 641	7, 482	6, 852	5, 738	3, 778	991	
New workers.....	369, 090	169, 595	113, 080	45, 613	15, 047	11, 856	9, 081	2, 999	1, 819	
Females.....	1, 690, 207	350, 189	336, 867	363, 133	293, 858	203, 457	105, 539	24, 796	12, 368	
Professional persons.....	64, 750	2, 149	11, 209	19, 030	14, 612	10, 318	5, 443	1, 435	554	
Farmers (owners and tenants).....	3, 152	115	227	622	819	767	408	142	52	
Other proprietors, managers, and officials.....	4, 131	50	171	498	1, 074	1, 255	848	199	36	
Clerks and kindred workers.....	371, 043	80, 510	89, 888	86, 225	61, 426	34, 778	14, 033	2, 301	1, 882	
Skilled workers and foremen.....	6, 280	354	656	1, 122	1, 579	1, 455	857	208	49	
Semiskilled workers.....	444, 547	54, 477	74, 874	102, 850	93, 164	69, 092	38, 126	8, 625	3, 339	
Farm laborers.....	45, 013	9, 504	8, 351	9, 597	7, 870	5, 579	2, 691	823	598	
Other laborers.....	14, 637	2, 663	2, 801	3, 546	2, 671	1, 775	815	198	168	
Servant classes.....	334, 724	49, 343	60, 686	81, 675	65, 984	44, 215	23, 512	6, 152	3, 157	
Occupation not reported.....	40, 665	11, 681	7, 255	7, 551	6, 319	4, 270	2, 380	762	447	
New workers.....	361, 265	139, 343	80, 749	50, 417	38, 340	29, 953	16, 426	3, 951	2, 086	

TABLE 4.—Persons Registered in Unemployment Census, by Class, Sex, Occupational Group, and Age, November 1937—Continued

Class, sex, and occupational group	Total	Age group								Not reported
		15 to 19	20 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74		
		Emergency workers								
Males	1, 673, 781	201, 217	207, 926	305, 468	339, 496	331, 352	227, 611	41, 896	18, 815	
Professional persons	51, 617	1, 053	5, 504	16, 281	11, 778	9, 742	5, 606	1, 277	376	
Farmers (owners and tenants)	45, 475	2, 846	3, 703	6, 787	11, 053	11, 490	7, 699	1, 227	670	
Other proprietors, managers, and officials	23, 225	453	763	3, 023	5, 952	7, 057	4, 867	908	202	
Clerks and kindred workers	122, 747	11, 351	16, 725	27, 894	28, 852	22, 429	12, 470	2, 107	919	
Skilled workers and foremen	306, 610	8, 706	15, 126	50, 297	79, 366	83, 684	56, 128	-10, 498	2, 805	
Semiskilled workers	270, 454	24, 200	34, 914	64, 718	63, 535	48, 207	27, 609	4, 669	2, 602	
Farm laborers	180, 197	47, 189	33, 474	27, 460	25, 698	23, 292	16, 900	2, 964	3, 220	
Other laborers	438, 311	25, 853	41, 852	78, 735	89, 965	102, 947	79, 193	14, 843	4, 923	
Servant classes	40, 110	6, 200	5, 751	6, 685	7, 954	7, 520	4, 755	756	480	
Occupation not reported	52, 270	6, 620	6, 150	8, 436	8, 891	10, 005	9, 002	2, 138	1, 028	
New workers	142, 765	66, 746	43, 964	15, 152	6, 452	4, 979	3, 382	509	1, 581	
Females	337, 834	50, 151	60, 212	58, 554	72, 201	58, 019	32, 137	3, 449	3, 111	
Professional persons	30, 696	832	3, 856	8, 425	8, 450	5, 982	2, 572	296	283	
Farmers (owners and tenants)	245	11	20	39	55	72	32	7	9	
Other proprietors, managers, and officials	1, 298	11	35	200	408	390	219	21	14	
Clerks and kindred workers	82, 179	14, 729	22, 948	16, 409	15, 610	8, 487	3, 135	271	590	
Skilled workers and foremen	4, 118	39	210	593	1, 272	1, 244	651	68	41	
Semiskilled workers	98, 542	5, 609	10, 595	16, 046	24, 760	23, 676	15, 225	1, 725	906	
Farm laborers	3, 091	785	508	499	550	430	215	37	67	
Other laborers	2, 197	314	328	385	481	407	215	38	29	
Servant classes	34, 529	4, 704	5, 066	6, 668	8, 224	6, 173	3, 038	271	385	
Occupation not reported	21, 013	4, 650	3, 153	2, 741	3, 973	3, 628	2, 342	269	257	
New workers	59, 926	18, 467	13, 493	6, 549	8, 418	7, 530	4, 493	446	530	

MACHINE MINING OF COAL IN GERMANY

COAL mined by machine methods in Germany increased from 117,772,000 metric tons¹ in 1930 to 160,601,000 metric tons in 1937, according to the latest official report on the economics of the industry.² On a percentage basis, the increase in the ratio of machine-mined to total tonnage was from 82.5 to 87.0. In both 1936 and 1937, 87.0 percent of the total tonnage was machine mined, notwithstanding that total production increased from 158,283,000 to 184,513,000 metric tons. Total coal produced, coal mined by machine, and the ratio of machine-mined to total tonnage are shown, by years, from 1930 to 1937, in the table following.

Mechanized mining has progressed in varying degrees in the seven major coal districts. In Aachen practically the entire tonnage (99.3 percent) was mechanically cut in 1937, having increased from 89.2 percent of the total in 1930. All districts except Upper Silesia reported over 90 percent of the total product mechanically mined in the latest year for which statistics are available. Upper Silesia

¹ A metric ton = 2,204.6 pounds.

² Germany. Reichskohlenrat. Statistische Übersicht über die Kohlenwirtschaft im Jahre 1937. Berlin, 1938, p. 43.

accounted for only 6,555,000 metric tons of coal in 1937 and the low percentage of coal cut by machine in that district, owing to peculiar circumstances, did not materially affect the ratio of machine cut to other tonnage.

Amount and Percent of Total Tonnage Mined by Machine in Germany, 1930-37

Year	Production (in metric tons)		
	Total	Mined by machine	Percent mined by machine
1930.....	142,699,000	117,772,000	82.5
1931.....	118,640,000	99,652,000	84.0
1932.....	104,741,000	87,711,000	83.7
1933.....	109,692,000	91,899,000	83.8
1934.....	124,857,000	105,906,000	84.8
1935 ¹	143,003,000	121,112,000	84.7
1936.....	158,283,000	137,636,000	87.0
1937.....	184,513,000	160,601,000	87.0

¹ Saar included beginning in March 1935.



LABOR FUND FOR TRAINING ETHNIC RUMANIANS

A RUMANIAN royal decree of March 29, 1938, provided for the establishment of a labor fund to be administered by a special bureau of the Ministry of Labor.¹ It is stated that various efforts of the Rumanian Government to supplant Rumanian citizens of other origins (Saxon, Hungarian, Jewish) engaged in industries and trades with citizens of Rumanian ethnic origin have met with difficulties because of the lack of trained Rumanian personnel. The purpose in creating the labor fund appears to be to train ethnic Rumanians so that they can take over positions now filled by others.

The fund is to be used for (1) institutions for training of apprentices, laborers, private employees, and tradesmen; (2) public works for the employment of Rumanian laborers and for absorbing the unemployed; (3) employment offices; (4) training of business administrators and the placing of trained ethnic Rumanian employees; (5) physical, intellectual, moral, and artistic education of laborers and tradesmen, and their organization.

¹ Data are from report of Franklin Mott Gunther, American Minister at Bucharest, dated April 5, 1938.

The labor fund will be supported from varied sources, including taxes on work permits, a tax of 2 lei² per week for each employee in an enterprise employing more than 10 workers, a contribution from employers of 1 percent of their pay roll, taxes provided for in the law authorizing labor chambers, and an annual tax on employers of foreigners.

The fund will also benefit from various district and communal taxes, from labor fines, and from income received from the property of the fund.

Although under the direction of the Minister of Labor, the fund will be supervised by an advisory committee which is to consist of an industrialist appointed by the Union of Industrialists of Rumania; an employer; two employees named by the Bucharest Chamber of Labor; a sociologist appointed by the Ministry of Labor; the Director of Social Insurance; and the Director of Labor.

² Average exchange rate of lei in March 1938=0.73 cent.

Industrial Accidents and Safety

CAUSES AND PREVENTION OF ACCIDENTS IN THE CONSTRUCTION INDUSTRY, 1936

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Summary

IT IS generally recognized that the construction industry is highly hazardous and that its employees have a large number of disabling injuries. For the entire industry it has been estimated that during 1936 about 2,700 of its workers were killed, 15,400 were permanently injured, and 265,000 were temporarily incapacitated.¹ Roughly, for every four workers employed during the year, there was one disabling accident.

To throw light on the causes of accidents, the Bureau of Labor Statistics, in cooperation with the Associated General Contractors of America, Inc., circularized 600 firms representing various types of construction activities in all parts of the country. Because of the recognized difficulty of obtaining facts concerning accidents in the construction industry, it was considered desirable, before attempting a larger coverage, to obtain a measure of the responsiveness which might be expected under very favorable conditions. The survey was therefore restricted to firms which, as members of the association, were aware of its safety activities and which were also accustomed to reporting to the Bureau in connection with public-contracts work. Of the 600 firms covered, 200 replied, and 143 furnished data in sufficient detail to permit analysis of accident causes.

The results of the survey disclosed very high average injury rates—a frequency rate indicating 165 disabling injuries for every million hours worked, and a severity rate showing 26 days lost for every thousand hours worked. Highest of the rates for the 3 construction branches studied were those for heavy and railroad construction—202 for frequency and 46 for severity. For the other 2 branches, the frequency rates for highway and for building construction were, respectively, 156 and 121, and the severity rates were 12 and 11.

Analysis of the individual returns disclosed that accident prevention is decidedly possible. Firms with nearly the same average number of employees reported wide variations in accidents experi-

¹See Monthly Labor Review, July 1938 (p. 18). Industrial Injuries in the United States During 1936.

enced. Some had none or very few accidents during 1936; in others the number of disabling accidents was greater than the number of employees. For instance, in highway construction, one firm with 200 employees reported 6 disabling accidents; another, with the same number of workers, reported 220 such accidents. In building construction, a firm with 70 employees had no disabling accidents, while one with 72 employees had 104—3 accidents for every 2 workers.

The descriptions of individual disabling accidents clearly indicated that most of them could have been prevented if managements had taken the necessary precautions and had obtained the cooperation of their employees, even resorting to disciplinary measures where necessary to enforce compliance with safety rules. Although accident prevention is probably more difficult in construction than in most other types of industries—because of the nature of the work, the large labor turn-over, weather conditions, etc.—it is quite obvious from the reports received that the high toll of disabling accidents, in terms both of human suffering and of economic cost, could have been very greatly reduced.

The statistics given here show the seriousness of the accident situation, and emphasize the importance of the safety rules and standards of safe practice contained in the Manual of Accident Prevention in Construction (1938 edition) of the Associated General Contractors of America.

TABLE 1.—*Injury Rates in 3 Branches of Construction, 1936*

Item	Type of construction			
	All types	Building	Heavy and railroad	Highway
Number of firms reporting.....	143	58	38	47
Frequency rate (average number of disabling injuries per million hours worked).....	165	121	202	156
Severity rate (average number of days lost per thousand hours worked).....	26	11	46	12
Number of injuries ¹ per thousand workers, resulting in—				
Death.....	2	2	3	1
Permanent partial disability.....	13	5	23	6
Temporary total disability.....	219	179	247	211
Total.....	234	186	273	218
Average time loss per disabling accident:				
Per permanent partial disability.....days..	1,663	950	1,826	1,262
Per temporary total disability.....do.....	16	16	17	15

¹ Rounded figures.

Accident Experience in the Industry

ALL FIRMS REPORTING

The entire group of reporting firms had during 1936 an average of 12,912 employees, who worked a total of 18,245,431 hours. The fre-

quency rate of 165 indicates, for every million hours worked, 165 injuries which either killed, maimed, or temporarily disabled workers.

On the average, 234 fatal or disabling accidents occurred among every thousand workers.

For every thousand employed, 2 were killed, 13 were permanently crippled, and 219 were temporarily disabled for an average of 16 days each.

Of the 143 reporting firms 25 stated that they had had no disabling accidents during the year. These 25 firms, however, were generally small with an average force of 29 employees each. Exclusion of this group would increase the frequency rate for the firms which experienced disabling accidents during the year from 165 to 177, and the severity rate from 26 to 28.

Of the 3,016 disabling accidents, 24 were fatal, 170 permanently disabling, and 2,822 temporarily disabling. Four deaths were attributed to falling objects, and three each to falls from one level to another, operation of machinery, and use of explosives. Two men were killed by striking against objects, one in a cave-in, another in the operation of a motor vehicle, and one by drowning. Six fatalities were attributed to miscellaneous causes.

Construction machinery, the most frequently recurring cause of permanent injuries, was responsible for 49 such injuries during 1936. Thirty-four permanent injuries were incurred in the handling of objects, 20 were attributed to hand tools, and 13 to falling objects.

The largest number of temporary total disabilities, nearly one-fourth of the total, resulted from the handling of objects. Stepping on or striking against objects caused 451 temporary total disabilities, hand tools 263, falling objects 226, and construction machinery 219.

The total time-loss charge for the 3,016 injuries was 473,059 days, of which 144,000 were for fatalities, 282,950 for permanent injuries, and 46,109 for temporary total disabilities. The time charges are based on the standard approved by the American Standards Association in 1937.

BUILDING CONSTRUCTION

The 58 reporting firms engaged in building construction had 3,314 employees who had worked 5,063,577 man-hours. These employees experienced 615 disabling injuries, with a total time charge of 54,909 days, resulting in a frequency rate of 121 and a severity rate of 11. For every 1,000 employees there were 2 deaths, 5 crippling injuries, and 179 temporarily disabling injuries.

Three deaths were charged to falling objects, more than to any other single cause. One fatality resulted from falling from an elevation, and another from stepping on or striking against an object. Of the 16 maiming injuries, 6 were charged to operation of machinery and 5 to

handling of objects. The outstanding cause for temporary total disabilities was stepping on or striking against objects, with a total of 165. Handling of objects caused 85 temporary disabilities, hand tools 67, and falling objects 52.

Twelve firms in building construction reported that they had gone through the entire year without disabling injuries. These firms, however, had a total employment of only 395, ranging from 10 to 70 per establishment; 3 had 50 or more employees.² If these no-accident firms are removed from the group, the frequency rate for the firms reporting accidents would rise from 121 to 141 and the severity rate from 11 to 13.

HEAVY AND RAILROAD CONSTRUCTION

Included in this classification are 38 firms with 5,605 employees, who worked a total of 7,587,448 hours. These companies were engaged in such activities as the construction of abutments, aqueducts, elevated highways, heavy foundations, docks and harbors, large bridges and viaducts, locks, dams, levees, sewers, tunnels, etc.

This group reported a total of 1,530 disabling injuries, of which 15 were fatal, 130 permanent, and 1,385 temporary in character. The frequency rate was very high—202, which would be raised to 203 if 3 establishments without disabling accidents were excluded. In this kind of work, of every 1,000 workers employed in 1936 nearly 3 were killed, 23 crippled, and 247 temporary disabled. The average time loss for temporary disabilities was slightly in excess of 17 days per case.

Explosives ranked as the outstanding cause of deaths in this branch of the industry, with three fatalities. Two deaths each were attributed to falls from an elevation and to operation of construction machinery. One death was caused by drowning, another by a falling object, and a third by a cave-in. Miscellaneous causes accounted for five fatalities.

The operation of machinery was the outstanding cause of permanent injuries. Thirty-four, or more than one-quarter of the total of 130, were attributed to this cause, 22 to the handling of objects, 14 to the use of hand tools, and 13 to falling objects. For temporary total disabilities, the handling of objects is shown as the most frequently recurring cause, with 363 disabling accidents. Stepping on or striking against objects accounted for 196, and falling objects for 174 such disabilities.

HIGHWAY CONSTRUCTION

The 47 firms reporting this type of construction had an average of 3,993 employees during the year who worked a total of 5,594,406 hours. A total of 871 disabling injuries, with a total time loss of 66,740 days, resulted in a frequency rate of 156 and a severity rate of 12.

² It is not to be concluded, however, that as a group the smaller firms had the best accident experience. See subsequent discussion concerning the relation of firm size to frequency of injuries.

Seven of these firms reported that none of their employees had disabling injuries during the year. Deducting the hours worked by these employees would result in frequency and severity rates, for the remaining firms, of 168 and 13, respectively. Only 2 of the 7 accident-free firms had 50 or more employees.

The 47 firms engaged in highway construction reported 4 deaths, 24 permanent partial injuries, and 843 temporary total disabilities. Per 1,000 employees these figures indicate 1 death, 6 permanent injuries, and 211 temporary total disabilities each with an average duration of not quite 15 days.

One death each was attributed to operation of machinery, operation of motor vehicles, stepping on or striking against objects, and miscellaneous causes. Operation of machinery alone caused 9 of the 24 permanent partial disabilities; handling of objects was shown as a cause in 7, and the use of hand tools in 4. Of the temporary total injuries, 221, or slightly more than one-quarter of the total of 843, were attributed to handling of objects, 106 to hand tools, 93 to operation of machinery, 90 to stepping on or striking against objects, and 56 to falls on a level surface. In 223 cases miscellaneous causes not listed here were involved.

TABLE 2.—*Injury Rates and Injury Causes for 143 Construction Firms, 1936*

Cause of injury	Number of injuries resulting in—			Total		Days lost because of—				Injury rates	
	Death and permanent total disability	Permanent partial disability	Temporary total disability	Number	Percent	Death and permanent total disability	Permanent partial disability	Temporary total disability	Total	Frequency	Severity
All construction (143 firms, 12,912 employees, 18,245,431 employee-hours worked)											
All causes.....	24	170	2,822	3,016	-----	144,000	282,950	46,109	473,059	165.30	25.93
Collapse of temporary or permanent structure.....		2	25	27	0.9		5,800	736	6,536	1.48	.36
Drowning.....	1			1	0	6,000			6,000	.05	.33
Falling objects.....	4	13	226	243	8.1	24,000	30,600	4,258	58,858	13.32	3.23
Falls from higher level.....	3	7	119	129	4.3	18,000	15,900	4,480	38,380	7.07	2.10
Falls on level surface.....		8	165	173	5.7		8,400	3,000	11,400	9.48	.62
Handling objects.....		34	669	703	23.3		43,300	9,780	53,080	38.53	2.91
Operation of machinery.....	3	49	219	271	9.0	18,000	86,550	4,375	108,925	14.85	5.97
Operation of motor vehicles.....	1	7	100	108	3.6	6,000	20,000	2,078	28,078	5.92	1.54
Struck by passing vehicle.....			10	10	.3			418	418	.55	.02
Stepping on or striking against objects.....	2	10	451	463	15.3	12,000	8,500	4,172	24,672	25.38	1.35
Use of explosives.....	3	5	4	12	.4	18,000	7,600	32	25,632	.66	1.40
Use of hand tools.....		20	263	283	9.4		31,600	5,416	37,016	15.51	2.03
Slides or cave-ins.....	1	1	12	14	.5	6,000	500	356	6,856	.77	.38
All other causes.....	6	14	559	579	19.2	36,000	24,200	7,008	67,208	31.73	3.69

TABLE 2.—Injury Rates and Injury Causes for 143 Construction Firms, 1936—Continued

Cause of injury	Number of injuries resulting in—			Total		Days lost because of—				Injury rates	
	Death and permanent total disability	Perma- nent partial disability	Tem- po- rary total disability	Num- ber	Per- cent	Death and permanent total disability	Perma- nent partial disability	Tem- po- rary total disability	Total	Fre- quen- cy	Sev- erity
Building construction (58 firms, 3,314 employees, 5,063,577 employee-hours worked)											
All causes.....	5	16	594	615	-----	30,000	15,200	9,709	54,969	121.46	10.84
Collapse of temporary or permanent structure.....		1	21	22	3.6		1,800	576	2,376	4.34	.47
Falling objects.....	3		52	55	8.9	18,000		866	18,866	10.86	3.72
Falls from higher level.....	1		38	39	6.3	6,000		1,556	7,556	7.70	1.49
Falls on level surface.....			16	16	2.6			198	198	3.16	.04
Handling objects.....		5	85	90	14.7		1,900	1,027	2,927	17.77	.58
Operation of machinery.....		6	21	27	4.4		5,700	395	6,095	5.33	1.20
Operation of motor vehicles.....			4	4	.7			78	78	.79	.02
Stepping on or striking against objects.....	1	2	165	168	27.3	6,000	1,000	1,186	8,186	33.19	1.61
Use of hand tools.....		2	67	69	11.2		4,800	2,535	7,335	13.63	1.45
All other causes.....			125	125	20.3			1,292	1,292	24.69	.26
Heavy and railroad construction (38 firms, 5,605 employees, 7,587,448 employee-hours worked)											
All causes.....	15	130	1,385	1,530	-----	90,000	237,450	23,960	351,410	201.65	46.31
Collapse of temporary or permanent structure.....		1	4	5	0.3		4,000	160	4,160	.66	.55
Drowning.....	1			1	0	6,000			6,000	.13	.79
Falling objects.....	1	13	174	188	12.3	6,000	30,600	3,392	39,992	24.78	5.27
Falls from higher level.....	2	7	81	90	5.9	12,000	15,900	2,924	30,824	11.86	4.06
Falls on level surface.....		7	93	100	6.5		8,100	1,856	9,956	13.18	1.31
Handling objects.....		22	363	385	25.2		36,300	5,163	41,463	50.74	5.46
Operation of machinery.....	2	34	105	141	9.2	12,000	69,250	2,818	84,068	18.59	11.08
Operation of motor vehicles.....		6	52	58	3.8		18,200	1,208	19,408	7.64	2.56
Stepping on or striking against objects.....		7	196	203	13.3		6,900	1,953	8,853	26.75	1.17
Use of explosives.....	3	5	4	12	.8	18,000	7,600	32	25,632	1.58	3.38
Use of hand tools.....		14	90	104	6.8		18,900	852	19,752	13.71	2.60
Slides or cave-ins.....	1	1	12	14	.9	6,000	500	356	6,856	1.85	.90
All other causes.....	5	13	211	229	15.0	30,000	21,200	3,246	54,446	30.18	7.18
Highway construction (47 firms, 3,993 employees, 5,594,406 employee-hours worked)											
All causes.....	4	24	843	871	-----	24,000	30,300	12,440	66,740	155.69	11.93
Falls on level surface.....		1	56	57	6.5		300	946	1,246	10.19	.22
Handling objects.....		7	221	228	26.2		5,100	3,590	8,690	40.75	1.55
Operation of machinery.....	1	9	93	103	11.8	6,000	11,600	1,162	18,762	18.41	3.35
Operation of motor vehicles.....	1	1	44	46	5.3	6,000	1,800	792	8,592	8.22	1.54
Stepping on or striking against objects.....	1	1	90	92	10.6	6,000	600	1,033	7,633	16.44	1.37
Struck by passing vehicles.....			10	10	1.2			418	418	1.79	.07
Use of hand tools.....		4	106	110	12.6		7,900	2,029	9,929	19.67	1.78
All other causes.....	1	1	223	225	25.8	6,000	3,000	2,470	11,470	40.22	2.05

Relation of Firm Size to Frequency of Injuries

In table 3 are shown the average employment and total number of disabling injuries in a number of firms for each of the three types of construction. The wide disparity of the disabling-accident experiences indicates that in many instances adequate safety precautions

received little effective attention. In building construction, for instance, firm A, with only 7 employees, had 3 disabling accidents, while firm B, with 13 employees, had no disabling accidents. Similarly, firm F, with 45 employees, reported 27 disabling accidents; while firm G, with 46 employees, reported none, and firm H, also with 46 employees, reported only 1. Firm N, with 72 workers, had 104 disabling accidents, or about 3 accidents for every 2 workers. Within each size group selected, there are found both good and bad experiences. Among the larger firms, for instance, firm U with 150 employees, had only 2 disabling accidents, while firm V, with 166 employees, had the high number of 120. Firm W, again, had only 3 disabling accidents for 190 employees. Obviously, size of firm had little bearing on the accident experience of the firms listed, which, incidentally, were selected at random.

The reporting firms engaged in heavy and railroad construction showed a greater tendency than either of the other groups to a larger number of workers. The variations in the number of accidents experienced for firms of nearly the same size were not so great as in the case of building construction. Nevertheless, there were the same wide differences in the accident experiences of individual plants as were found in the other two types of construction activity.

TABLE 3.—*Injury Experiences of Selected Individual Firms in 3 Branches of Construction, 1936*

Firm	Building		Heavy and railroad		Highway	
	Number of employees	Number of disabling injuries	Number of employees	Number of disabling injuries	Number of employees	Number of disabling injuries
Firm A.....	7	3	6	0	14	0
Firm B.....	13	0	35	1	28	0
Firm C.....	17	8	35	7	34	0
Firm D.....	27	8	36	0	36	0
Firm E.....	32	0	38	14	38	0
Firm F.....	45	27	45	20	40	1
Firm G.....	46	0	47	19	45	1
Firm H.....	46	1	76	13	50	0
Firm I.....	50	0	80	128	60	21
Firm J.....	57	14	82	28	70	62
Firm K.....	66	0	85	37	84	53
Firm L.....	68	31	104	16	88	0
Firm M.....	70	0	144	55	89	37
Firm N.....	72	104	144	37	94	3
Firm O.....	80	41	205	47	95	36
Firm P.....	81	30	284	99	103	4
Firm Q.....	90	1	286	94	114	34
Firm R.....	92	22	298	135	135	23
Firm S.....	100	2	465	58	149	61
Firm T.....	100	5	571	200	200	6
Firm U.....	150	2	777	91	200	220
Firm V.....	166	120	835	314	210	4
Firm W.....	190	3			212	63
Firm X.....	230	68			215	1

In highway construction there appears to be a tendency toward lower numbers of accidents for the reporting establishments, although the great variety in accident experience by individual firms again is in evidence. Firms A, B, C, D, E, F, G, and H, with a total of 285 workers, had a total of only 2 disabling accidents. Firm I, however, with 60 employees, had 21 such accidents, and firm J, with 70 employees, had nearly as many accidents as it had workers—62. The same wide difference in individual experiences as were pointed out for the other two branches of construction are again apparent. It appears that some of these firms, large and small alike, have been able to prevent accidents, while in others, both large and small, accidents have run riot.

By the use of some arbitrarily selected limits, it is possible to arrive at frequency rates for firms classified by size. In table 4 such rates are shown, as well as the size classification observed.

TABLE 4.—*Injury Experience of Firms Classified by Size According to Employment*

Item	Size of firm (measured by number of employees) ¹			
	Small	Medium	Large	Total
Building construction:				
Number of firms reporting.....	35	13	10	58
Number of employees.....	1,004	903	1,407	3,314
Average number of employees per establishment.....	29	69	141	57
Total employee-hours worked ²	1,543,000	1,437,000	2,083,000	5,064,000
Total disabling injuries.....	130	249	236	615
Frequency rate.....	84	173	113	121
Heavy and railroad construction:				
Number of firms reporting.....	20	11	7	38
Number of employees.....	751	1,338	3,516	5,605
Average number of employees per establishment.....	38	122	502	148
Total employee-hours worked ²	765,000	1,930,000	4,892,000	7,587,000
Total disabling injuries.....	156	390	984	1,530
Frequency rate.....	204	202	201	202
Highway construction:				
Number of firms reporting.....	22	11	14	47
Number of employees.....	748	862	2,383	3,993
Average number of employees per establishment.....	34	78	170	86
Total employee-hours worked ²	842,000	1,438,000	3,315,000	5,594,000
Total disabling injuries.....	69	275	527	871
Frequency rate.....	82	191	159	156

¹ The classification by size was as follows: Building and highway construction—under 50 employees, small; 50-99, medium; 100 or more, large. Heavy and railroad construction—under 75, small; 75-249, medium; 250 or more, large.

² Rounded figures.

In building construction, the medium-sized firms had a frequency rate of 173, more than twice that of the average of 84 for small establishments, and about half again as large as that of 113 for large establishments.

In heavy and railroad construction, there was practically no variation in the average frequency rates of the different size groups. Large firms, with a rate of 201, had a slightly lower rate than either of the other two groups, with 202 and 204 for the medium and small firm groups respectively.

In highway construction, however, large differences in the frequency rates appeared. Parallelling the experience in building construction, medium-sized concerns, as a group, had the largest frequency rate, 191. This rate was nearly two and one-third times the rate of 82 for the group of small firms, and considerably above that of 159 for the group of large firms.

If the small group covered in this survey accurately reflects the condition in the construction industry, then, on the whole, small firms have the safest records in both the building and highway branches of the industry, and the medium-sized firms the worst. In heavy construction the disabling accident records of all the size groups are equally bad.

Causes and Prevention of Disabling Accidents

Reporting concerns were asked to describe in some detail their more serious accidents. A considerable number did so, thereby making it possible to determine the unsafe acts or unsafe conditions which made the accidents possible. As will be seen from the accident descriptions which follow, the basic reasons often were lack of proper supervision and inspection, lack of proper safety instruction of workers, and at times lack of even elementary safety precautions.

After each of the following brief descriptions of individual accidents, suggestions are given as to how the accident could have been prevented.

DESCRIPTION OF ACCIDENTS AND METHODS OF PREVENTION ³

Building construction

1. A plank on which worker was standing while removing metal floor forms broke, dropping worker 4 feet. An injured ankle disabled worker for more than 14 weeks.

Planks should be inspected before using, for proper size of span and to make certain that they are of sound material. Planks should not be overloaded.

2. Worker fell from scaffold when scaffold horse broke. Wrenched shoulder.

Scaffolds should be inspected frequently and be constructed of sound material. Scaffolds should not be overloaded.

3. Manila rope broke, letting wooden gin pole fall. Worker was struck on head and killed instantly. (Rope loaded below rated capacity.)

Rope should be inspected frequently, because it deteriorates quickly if saturated with water. Although the rope was loaded below capacity, it must have been defective.

4. Wire cable broke, letting large guyed steel derrick fall on worker, who was killed instantly.

Cables should be inspected frequently for defects, and should be replaced if found worn, frayed, or partially broken. Cables which have been reduced in diameter, as a result of wear and strain, should be discarded or used for lighter loads.

³ Acknowledgement is made for the assistance furnished in the determination of proper safety measures by W. A. Snow, safety director, Associated General Contractors of America, and R. P. Blake, senior safety engineer, Division of Labor Standards, U. S. Department of Labor. The analysis was made from cards to which the descriptions of accidents had been transcribed, so as not to reveal the identity of reporting establishments.

5. Worker jumped out of first-floor window, lost balance, and fell against concrete corner. He died of internal injuries.

Workers should not be permitted to leave buildings except through regular passageways and exits, which in turn should be guarded to prevent falls and injuries from falling objects.

6. Worker, leaving building, was struck on head by brick falling from scaffold.

Passageways under scaffolds and doorways should have overhead protection. Men should be instructed to use regular passageways. Scaffolds should be provided with toeboards, and bricks should not be piled too high.

7. Carrying boards to carpenter operating power saw, a worker attempted to steady boards and cut hand on saw.

All power saws should be properly guarded, and guards kept in place at all times when saws are in operation.

8. While lifting rock, worker wrenched his back.

Workers should be carefully instructed in proper methods of lifting.

9. Worker, throwing bricks up to bricklayer on scaffold, was struck by a brick that fell off the scaffold and his toe was broken.

Bricks should not be thrown, but should be elevated in a hod or material hoist. Scaffolds should be provided with toeboards.

10. Barrel rolled on worker, bruising foot and arm.

Barrels placed on sloping surfaces should always be blocked; they should also be blocked on level surfaces if they may be set in motion by contact with persons or materials.

11. Man, knocked from ladder when ladder was struck by wheelbarrow, suffered broken arm and bruises.

Ladders should not be placed in passages or runways. Ladders should be attached to support. Workers should be cautioned to keep mind on work and to consider safety of fellow workers.

12. Worker stepped on nail and punctured foot.

Nails should either be withdrawn as material is handled, or material should be so piled as to remove danger of stepping on it. Workers should always wear good shoes with substantial soles.

Heavy and railroad construction

1. Boom of crane struck high voltage wires. Current traveled down cables, through pipe being lifted, and electrocuted 2 men and injured a third.

If possible, power should be cut off all overhead electric wires within range of boom. If this is not possible, the crane should be well grounded. Current from high voltage wire will jump or arc from 1 to 3 feet, which fact should be considered in determining the safe working area.

2. Worker, standing behind crane, was caught between crane and pile of lumber when crane swung around, and was killed.

Crane operator should move crane only on signals from groundman, who should make sure no workers are in danger.

3. While repairing a cofferdam, it was necessary for a diver to cut sheet pile under water at the break. Diver, after cutting and hooking a section, came to surface, removed helmet while on a barge 30 feet from the barge supporting crane, and gave signal to lift. The two sides of boom buckled, causing boom to bend and drop. End of boom struck and killed diver. (Boom had been inspected 2 days before failure, and new cables installed.)

Derricks should not be overloaded nor operated beyond radius safe for loads. Advisable to have attached to derrick a notation of the safe loads for various radii.

4. A locomotive crane, being used in pile driving, became unbalanced and tipped. Operator jumped, and was struck and killed by front truck of crane. Another worker received minor injuries.

See preceding safety rule. Locomotive cranes should be clamped to rails and their outrigging properly extended and blocked to prevent upsetting.

5. Worker wrenched his back while clearing himself from a slide in a trench.

Trenches should be shored properly.

6. While working in a trench, worker was killed when rock fell on his head.

Trenches should be shored properly and excavated materials piled at a safe distance, at least 18 inches, from edges of trench.

7. Rock slid from bank of trench, resulting in injury to hand.

Soil to be excavated should be inspected carefully and necessary shoring installed.

8. While air hose was being lowered into a trench, a rock was loosened and dropped on worker's head.

Men should not be permitted to work below point at which materials or tools are lowered into trench. Men working in deep trenches should wear "hard hats."

9. Worker, engaged in blasting operations, was struck on head by piece of rock.

Men should be kept out of danger areas during blasting. Shelter houses should be provided, and, if practicable, blasting mats should be used.

10. Drill struck stick of dynamite, causing explosion. Three workers were killed and 5 injured.

After each round of blasting, a close examination should be made for unexploded shots. The blaster should, if possible, count the number of shots exploding.

11. Worker hit left ankle with a sledge hammer.

Workers should be instructed in proper use of tools—in this instance, in the proper stance, and the proper holding and swinging of sledge. Use of sledges with defective striking surfaces should be avoided.

12. Pick glanced off frozen ground, striking worker's right leg.

In picking frozen ground, workers should proceed with caution, using moderate swings and keeping firm hold on pick handle so as to retain control over tool at all times.

13. A light anchor, thrown aboard, fell on worker's foot.

Objects should never be thrown when there is danger of striking a person.

Highway construction

1. Friction failed to hold when a gasoline crane lifted a load. Boom fell, killing 1 worker and injuring another.

Cranes should be inspected frequently. Men should be kept at a safe distance from shovel, and should never be permitted to go under it.

2. A large chunk of dirt fell from excavator, injuring 2 workers.

Same as in 1, above.

3. A large chunk of dirt fell from excavator when motor suddenly failed to function. Back of worker, who was standing underneath excavator, was badly bruised.

Same as in 1, above.

4. A piece of steel lodged in a worker's eye, while worker was engaged in operation of removing old steel tracks, using sledges and picks. Because of inflammation in eyes, resulting from a cold, man did not realize injury to eye until a week later. By that time infection made necessary the removal of the eyeball.

Men engaged in this type of work should wear appropriate goggles.

5. Worker, for some unknown cause, fell 40 feet from door of asphalt mixing plant and was killed instantly.

Elevated door openings should never be left unguarded.

6. One of a crew loading a truck in a gravel pit tried to board moving truck; he missed the running board, fell beneath wheels of loaded truck, and was killed.

Never allow men to board trucks in motion.

7. Worker caught hand between 2 moving iron beams being lifted, and lost little finger of left hand.

Workers should be instructed and required to steady or guide beams by using a line.

8. Four men punctured holes in bottom of feet by stepping on nails.

Boards with nails in them should be kept out of passageways, the nails pulled or the boards turned down so that there will be no danger of workers stepping on nails. Workers should wear good shoes with substantial soles.

9. Fourteen men suffered burns to face, hands, feet, and other parts of body while handling cement in hot weather.

Workers should wear clothing which gives adequate protection. A high-grade vaseline should be used on hands, face, and other exposed parts to prevent cement burns. Personal cleanliness and frequent washing are considered to be the most effective preventives.

A thoughtful reading of these accident descriptions and the safety rules which were violated indicates that much can be done to prevent accidents in the construction industry. The unfavorable experience of the industry should not be condoned on the ground that the accident experience always has been bad. The fact that it may be necessary to deviate from accustomed methods of working when this may be essential for safety should deter neither management nor labor.

Labor Laws

RAILROAD UNEMPLOYMENT-INSURANCE ACT, 1938

AN ACT providing a comprehensive system of unemployment insurance for employees of carriers engaged in interstate commerce was approved by the President on June 25, 1938. This action added another measure to those already passed by Congress—Railway Labor Act, Employers' Liability Act, and Railroad Retirement Act—in recognition, by that body, of problems peculiar to the railroad industry, necessitating separate consideration. The new unemployment-insurance act (Public No. 722) provides for a system designed to meet the special needs of the railroad industry, and removes the employees from the coverage of other unemployment-compensation acts.

Under this act contributions are to be made exclusively by the carriers. The costs of the system, including both the payment of unemployment benefits and the administration of the act, will be paid from funds into which are to be deposited the taxes collected from employers. The administration of the act is vested in the Railroad Retirement Board. The principal provisions of the act are as follows:

Coverage

The act covers employees of every carrier (express company, sleeping-car company, or carrier by railroad subject to part I of the Interstate Commerce Act) and any company directly or indirectly owned or controlled by one or more carriers. The act also covers employees of railroad associations, traffic associations, tariff bureaus, demurrage bureaus, weighing and inspection bureaus, collection agencies, and other associations, bureaus, agencies, or organizations controlled and maintained wholly or principally by two or more carriers and engaged in the performance of services in connection with or incidental to railroad transportation, and railway labor organizations organized in accordance with the provisions of the Railway Labor Act. Certain employees are exempt, such as employees of street, interurban, or suburban electric railways, unless such railway is operating as a part of the general steam-railroad system of transportation.

Benefits

Employees eligible under the act will be paid benefits for each day of unemployment in excess of 7 during any half month, after June

30, 1939. The following table shows the benefits payable to such employees for each day of unemployment.

Total compensation for employment during base year:	Amount of daily benefits
\$150 to \$199.99.....	\$1. 75
\$200 to \$474.99.....	2. 00
\$475 to \$749.99.....	2. 25
\$750 to \$1,024.99.....	2. 50
\$1,025 to \$1,299.99.....	2. 75
\$1,300 and over.....	3. 00

The maximum benefits payable to an employee for unemployment within a benefit year may not exceed 80 times the daily benefits payable to such employee. The Board is authorized to prescribe regulations for determining the amount of daily benefits, and the maximum benefits during any year, to be paid to part-time workers, and for determining the days of unemployment with respect to which such benefits are payable. Such regulations must provide benefits reasonably proportionate to the benefits provided for other employees. Benefits may not be assigned and are not subject to any tax or to garnishment, attachment, or other legal process.

Qualifications for receipt of benefits.—An employee is qualified to receive benefits if the Board finds that there was compensation payable to him of not less than \$150 with respect to employment during his base year, and if within 6 months prior to his benefit year and after June 15, 1939, he has had a waiting period of at least 15 consecutive days of unemployment or 2 half-months during each of which he had at least 8 days of unemployment.

Any employee unemployed for any of the following reasons will not receive benefits: Voluntarily leaving work without good cause; discharge for misconduct; failure, without good cause, to accept suitable work; and unemployment due to a strike. These disqualifications do not apply in the case of the refusal to accept a position which is vacant because of a strike, lock-out, or other labor dispute, or if the remuneration, hours, or other conditions of work are less favorable to the employee than those prevailing for similar work in the locality, or the rate of remuneration is less than the union wage rate, if any, for similar work in the locality. An employee is not required to accept work if, as a condition of being employed, he would be required to join a company union or to resign from or refrain from joining any bona-fide labor organization.

Claims.—Claims for benefits must be made according to the regulations prescribed by the Board, which is authorized to make findings of fact with respect to any claim for benefits and to make decisions as to the right of any claimant to benefits. It may also hold hearings, conduct investigations and other proceedings, and establish, by regulations or otherwise, such procedures as it may deem necessary or proper for the determination of a right to benefits.

Each claimant whose claim for benefits has been denied upon an initial determination must be granted an opportunity for a fair hearing before a district board. The Board may establish such district boards and prescribe regulations governing the filing of cases with, and the decisions of such cases by, the district boards, and the review of such decisions. The Board may also provide for intermediate reviews of such decisions.

A claimant, and any railway labor organization of which the claimant is a member, may obtain a review of any final decision of the Board by filing a petition for review within 90 days after the mailing of notice of such decision to the claimant in the United States district court for the district in which the claimant resides, or in the United States District Court for the District of Columbia. The court then will have exclusive jurisdiction of the proceeding and must give priority "in the adjudication thereof over all other civil cases not otherwise entitled by law to precedence." The court also shall have power to enter a decree affirming, modifying, or reversing the decision of the Board, with or without the necessity of returning the case for a rehearing. The findings of the Board as to the facts, if they are supported by evidence and in the absence of fraud, shall be conclusive.

Contributions

The employer is required to contribute an amount equal to 3 percent of the compensation (not in excess of \$300 per month) payable by the employer to an employee. The contributions are to be collected by the Board and deposited with the Secretary of the Treasury of the United States.

The Secretary of the Treasury must maintain in the unemployment trust fund an account to be known as "the railroad unemployment-insurance account." This account will consist of 90 percent of all contributions collected, as well as money advanced by the Secretary of the Treasury, and funds appropriated by Congress. All moneys credited to this account may be used for the payment of benefits under the act.

The act also establishes in the United States Treasury a fund to be known as the railroad unemployment-insurance administration fund which will consist of 10 percent of all contributions collected and money advanced to the fund by the Secretary of the Treasury, together with amounts appropriated by Congress. Moneys at any time credited to the fund are permanently appropriated to the Board, to be continuously available for any expenses incidental to the administration of the act.

Powers of Board

The Board is empowered to issue subpoenas requiring the attendance and testimony of witnesses and the production of evidence before the

Board or any of its members, employees, or representatives. Such persons may administer oaths and affirmations, examine witnesses, and receive evidence.

In case of refusal to obey a subpoena lawfully issued to any person, the Board may invoke the aid of the district court of the United States or the United States courts of any Territory or possession, where such a person is found or resides, or the District Court of the United States for the District of Columbia. Any such court shall issue an order requiring such person to appear before the Board or its specified employee or representative and to produce evidence or give testimony. Any failure to obey an order may be punished as a contempt of court.

The Board may establish, maintain, and operate free employment offices, and may designate as free employment offices facilities maintained by a railway labor organization organized in accordance with the provisions of the Railway Labor Act, or one or more employers, or an organization of employers, or a group of such employers and labor organizations, or a State, Territorial, foreign, or the Federal Government. The Board is empowered to prescribe a procedure for registration of unemployed persons at employment offices.

The Board is also authorized to appoint national or local advisory councils composed of equal numbers of representatives of employers, representatives of employees, and persons representing the general public, for the purpose of discussing problems in connection with the administration of the act and aiding the Board in formulating policies. The members of such councils are to serve without remuneration, but may be reimbursed for any necessary traveling and subsistence expenses.



ESTABLISHMENT OF MARITIME LABOR BOARD

BY AN amendment¹ to the Merchant Marine Act of 1936, approved on June 23, 1938, a Federal Maritime Labor Board was established to aid in the settlement of disputes between maritime employers and employees. The Board is to be composed of three members, and among other duties it is directed to prepare by March 1, 1940, recommendations for a permanent Federal policy for the stabilization of maritime labor relations. On July 7, 1938, the President appointed Robert W. Bruere, chairman, and Louis Bloch and Claude E. Seehorn to be members of this Board.

The primary function of the Board is to encourage all maritime employers, their officers and agents, and their employees, to bargain collectively and endeavor to settle disputes amicably. In the words of the law, the Board is required to encourage employers and employees to make every reasonable effort to "make and maintain

¹ Publie No. 705.

written agreements concerning rates of pay, hours of employment, rules, and working conditions, which agreements shall provide, by means of adjustment boards or port committees, for the final adjustment of disputes growing out of grievances or the application or interpretation of the terms of such agreements," and to "settle all disputes, whether arising out of the interpretation or application of such agreements or otherwise, in order to avoid any interruptions to transportation of passengers or property in water-borne commerce."

The amended act does not affect or limit in any manner the provisions of the National Labor Relations Act, and no unfair labor practice under that act is a dispute for the purposes of the new act. The National Labor Relations Board will continue to determine questions relating to representation of employees of a maritime employer.

The Maritime Labor Board, upon request of either representatives of maritime employers or their employees who are parties to the making of a labor agreement, must encourage and assist in the making of such agreement, or, upon the request of both parties at interest, assist in the interpretation of the provisions of an agreement already in existence.

The parties to a dispute may request the Board to act as mediator in such disagreements. The Board may proffer its services in case any maritime labor dispute is found to exist. When a request for mediation is granted by the Board, or when the Board on its own initiative offers to mediate, it is required promptly to put itself in communication with the parties to such dispute and to use its best efforts by mediation to bring them to agreement. If the Board is unable through mediation to bring the parties to a dispute to an agreement, it must use its best efforts to secure the assent of both parties to arbitration of the matter in dispute.



WORK RELIEF ACT OF 1938

APPROPRIATIONS for work relief, as well as for general relief, and for increasing employment by loans and grants for public work projects were provided in Public Resolution No. 122, approved by the President on June 21, 1938.

Work and Other Relief

Title I relates to work relief and general relief, with an appropriation of \$1,712,905,000. Of this sum \$1,425,000,000 was allotted to the Works Progress Administration. For the following types of projects, expenditures are limited to the amounts stated: Highways, roads, and streets, \$484,500,000; public buildings, parks, public utilities, trans-

mission lines, sewer systems, water systems, airports and other transportation facilities, flood control, drainage, irrigation, conservation, and miscellaneous construction projects, \$655,500,000; and educational, professional, clerical, cultural, recreational, production, service, and miscellaneous nonconstruction projects, \$285,000,000. These amounts may be increased by as much as 15 percent by transfer of amounts from other classes of projects. The Works Progress Administrator is authorized to use such amounts, not exceeding \$25,000,000, as may be determined by the President to be necessary, for the direct relief of needy persons.

An appropriation of \$75,000,000 was made for the National Youth Administration; \$175,000,000 for Farm Security Administration loans; \$6,000,000 for the Puerto Rico Reconstruction Administration; and varying amounts to agencies of the Government for administrative expenses, including an appropriation of \$3,000,000 to the United States Employment Service. Except as otherwise provided, the funds must be used to provide relief and work relief for persons in need, and not more than 5 percent of the amount allotted may be used for administering relief. With the exception of flood-control and water-conservation projects authorized by other legislation, no project may be undertaken until there has been irrevocably set aside sufficient Federal funds for its completion, and non-Federal projects cannot be undertaken until the sponsors have made a written agreement to finance that part of the cost which is not to be supplied from Federal funds. The funds must be so apportioned, distributed, and administered over the period ending February 28, 1939, as to constitute the total amount that will be needed. In case of an extraordinary emergency this provision may be waived or modified by the President.

The measure contains several labor provisions. The prevailing rate of wages must be paid. In case minimum wages are established under the Fair Labor Standards Act for persons employed by private employers, not less than such minimum rates shall be paid to persons in similar occupations employed on projects of the Works Progress Administration. Employees injured while engaged on the various projects, and persons receiving assistance in the form of payments from the United States for services under the National Youth Administration, will be paid workmen's compensation. The amount of compensation is limited to \$50 per month, and the aggregate payments may not exceed \$4,000, exclusive of medical costs.

Aliens illegally within the United States, and aliens who have not declared their intention of becoming American citizens shall not be given employment or continued in employment. Certain employment preferences must be given in cases of veterans, etc.

Several provisions concern the recipients of work relief. Needy persons whose names have not heretofore been placed on relief rolls

are given the same eligibility for employment as persons whose names have appeared on such rolls. Farmers who need employment to supplement their farm income also are extended the same right. A person in need of relief, and employed on a work project, who refuses an offer of private employment which he is capable of performing and which pays as much or more in compensation for the same length of service, forfeits his right to work-relief employment during the period that such private employment would be available. However, any person accepting such private employment will, at the expiration of such employment, be entitled to relief work if he is still in need and has lost the private employment through no fault of his own. A relief worker is ineligible for employment on a Works Progress Administration project if he has refused to accept employment on any other Federal or non-Federal project at a wage rate comparable with or higher than that of the Works Progress Administration. Any relief worker engaged on any Federal or non-Federal project whose services have been terminated through no fault of his own is eligible for restoration to the relief rolls or for reemployment on any other project. The fact that an applicant has received payment on an adjusted-compensation certificate or adjusted-service bonds shall not be considered in determining his employment needs.

Appointments to Federal positions of an administrative or advisory nature, in any State, must be made from citizens of the State as far as possible. This does not apply to temporary appointments of not more than 60 days. The appropriation may not be used to pay the salary or expenses of a person in a supervisory or administrative position who is a candidate for any State, district, county, or municipal office in any election, or who is a campaign manager or an assistant manager for such a candidate. All appointments to the Federal service for employment within the District of Columbia, whether under the classified civil service or not, shall be apportioned among the several States and the District of Columbia on the basis of population. With the exception of those having military preference, in making separations or furloughs from the Federal service in the District of Columbia, preference in retention must be given to appointees from States which have not received their share of appointments according to population.

Public Works

Title II of the resolution appropriates \$965,000,000 to the Public Works Administration for (1) allotments to finance Federal projects, (2) grants or loans to States and other public agencies, and (3) the construction and leasing of projects. The Federal Emergency Administration of Public Works is continued until July 1, 1941, but

no allotment may be made for any project unless the application has been received prior to September 30, 1938. Funds may not be allotted for any project which cannot be started before January 1, 1939, or the completion of which cannot be substantially accomplished prior to June 30, 1940. Proceeds from the sale of securities up to the amount of \$400,000,000 may be used for the making of further loans. The administrative expenses for the fiscal year ending June 30, 1939, are limited to \$15,000,000.

It is also provided that not more than \$200,000,000 may be allotted to Federal agencies for Federal construction projects, and such projects must be selected from among the following classes: (1) Projects authorized by law and for the acquisition of land for sites for such authorized projects; (2) projects for the enlargement, extension, or remodeling of existing Federal plants, institutions, or facilities; (3) projects for hospitals and domiciliary facilities of the Veterans' Administration; and (4) projects for penal and correctional facilities under the Department of Justice. Not more than \$15,000,000 may be used for military or naval purposes except for the housing or hospitalization of personnel or for storage of material, supplies, and equipment at existing establishments.

Other Provisions

Title III of the resolution increases the amount authorized for the 3-year program in the acquisition of sites and the construction of public buildings from \$70,000,000 to \$130,000,000 and appropriates \$25,000,000 for this purpose.

Title IV gives the Rural Electrification Administration authority to borrow an additional \$100,000,000 from the Reconstruction Finance Corporation for loans to provide rural electrification. Borrowers are required, as far as practicable, to use American-made products.

By the provisions of title V, \$212,000,000 is appropriated to enable the Secretary of Agriculture to make parity payments to producers of certain agricultural products under the Agricultural Adjustment Act of 1938.

Title VI relates to the United States Housing Authority and authorizes an increase in the bond-issuing powers of this agency from \$500,000,000 to \$800,000,000, for 60-year loans for low-cost housing. The title also authorizes contracts for annual contributions aggregating not more than \$28,000,000.

Industrial Disputes

TREND OF STRIKES

ACCORDING to preliminary estimates, there were 60 fewer strikes beginning in June than in May and a decrease of 16,000 persons involved in new strikes. There were about 200,000 fewer man-days idle during strikes taking place in June than in May, the peak of strike activity so far this year.

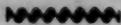
*Trend of Strikes, 1933 to June 1938*¹

Year and month	Number of strikes					Workers involved in strikes		Man-days idle during month or year
	Continued from preceding month	Beginning in month or year	In progress during month	Ended in month	In effect at end of month	Beginning in month or year	In progress during month	
1933.....		1,695				1,168,272		16,872,128
1934.....		1,856				1,466,695		19,591,949
1935.....		2,014				1,117,213		15,456,337
1936.....		2,172				788,648		13,901,956
1937.....		4,740				1,860,621		28,424,857
January.....	100	171	271	132	139	108,621	214,268	2,720,281
February.....	139	211	350	204	146	99,335	226,329	1,491,268
March.....	146	614	760	510	250	290,324	358,155	3,288,979
April.....	250	535	785	512	273	221,572	394,178	3,377,223
May.....	273	604	877	547	330	325,499	445,170	2,982,735
June.....	330	610	940	582	358	281,478	474,954	4,998,408
July.....	358	472	830	533	297	143,678	353,682	3,007,819
August.....	297	449	746	451	295	143,033	238,828	2,270,380
September.....	295	361	656	393	263	88,967	160,241	1,449,948
October.....	263	320	583	378	205	67,242	127,109	1,181,914
November.....	205	262	467	265	202	68,929	118,632	981,697
December.....	202	131	333	213	120	21,943	60,518	674,205
1938.....								
January.....	120	148	268	154	114	32,357	52,878	465,034
February.....	114	156	270	164	106	50,935	74,822	495,305
March.....	106	216	322	186	136	53,914	101,509	773,078
April.....	136	207	343	217	120	75,840	106,912	778,727
May.....	126	260	386	231	155	71,000	100,000	1,025,000
June.....	155	200	355	210	145	55,000	80,000	825,000

¹ Strikes involving fewer than 6 workers or lasting less than 1 day are not included in this table nor in the following tables. Notices or leads regarding strikes are obtained by the Bureau from more than 650 daily papers, labor papers, and trade journals, as well as from all Government labor boards. Letters are written to representatives of parties in the disputes asking for detailed and authentic information. Since answers to some of these letters have not yet been received, the figures given for the late months are not final. This is particularly true with regard to figures for the last 2 months, and these should be considered as preliminary estimates.

The second quarter of this year continued the sharp decline in number of industrial disputes compared to last year, when there were about 600 strikes beginning each month with from 220,000 to 325,000 workers involved, compared to 55,000 to 75,000 this year. There were only 16 percent as many man-days idle during strikes in June 1938 as in June 1937.

The figures given in the preceding table for May and June are based on newspaper reports and other information available as this issue goes to press. An analysis of strikes in each of these months, based on detailed and verified information, will appear in subsequent issues of the Monthly Labor Review.



ANALYSIS OF STRIKES IN APRIL 1938¹

ABOUT 40 percent as many strikes began in April 1938 as a year ago. In these April 1938 strikes there were one-third as many workers and one-fourth as many man-days idle as in 1937. Strikes beginning in April of this year totaled 207. Almost 76,000 workers were involved and there were approximately 778,700 man-days idle during these strikes. There were about the same number of strikes during the preceding month, March, and approximately the same number of man-days idle. The number of workers involved in strikes in March, however, was only 53,000.

The 12 strikes in automobile manufacturing included one-fourth of all the workers involved in all strikes which began in April. The largest of these automobile disputes took place at the Briggs Manufacturing Co., of Detroit, where a strike of 100 workers in the cushion department in protest against speed-up on assembly lines threw 7,000 employees out of work for 1 day. Work was resumed on the same basis as before the strike. Another 1-day strike involving 2,000 workers occurred at the Budd Wheel Co., in Detroit, when a union worker was transferred from a higher to a lower paid job. The union contended that this was in violation of seniority rules and that the company did not first consult with the shop steward as provided in the agreement. The company contended that this operator was transferred because his work had not been up to standard. The strike was terminated when the man was returned to his former job.

The Fisher Body Flint Division, employing about 3,700 workers, was closed for 3 days when the union, by picketing the plant, refused to let members work who were in arrears with their dues. The Fisher Body Tarrytown Division was closed for several days when the union protested the removal of two men which the company said was necessitated by an engineering change. A compromise settlement was made by the reduction of only one man.

The greatest number of strikes (19) beginning in April was in retail trade. The largest was a month's strike of 600 warehousemen of 4 Philadelphia stores for an increase in wages. Before a compromise settlement was reached clerks, building-service employees, and deliverymen were affected.

¹ Detailed information on a few strikes has not yet been received (see footnote to preceding table). Data on missing strikes will be included in the annual report.

The canning industry was second in the number of workers (7,450) involved in strikes beginning in the month. Most of these were in the two large strikes at Seattle and San Francisco against the Alaska salmon canneries. Although the question of wage reductions was involved, the chief issue was over union representation. The year previously, contracts had been signed with the American Federation of Labor unions. During the following months some of these locals and large numbers of members in others had transferred to the Committee for Industrial Organization. In elections held by the National Labor Relations Board during the strikes, the Committee for Industrial Organization won at both Seattle and San Francisco. The ships left for Alaska when it was decided to leave the wage question to a fact-finding commission, and the Committee for Industrial Organization agreed to let the companies hire their former employees who had retained membership in the American Federation of Labor.

The largest strike in the shoe industry was that of 3,000 employees of 10 Brooklyn factories. After 3 days the workers, through the Committee for Industrial Organization United Shoe Workers Union, obtained a year's agreement for a 40- instead of a 45-hour week, a closed shop, and a minimum weekly wage of \$12 for unskilled workers.

Streetcar service in Detroit was stopped for a day and a half when the Amalgamated Association of Street, Electric Railway and Motor Coach Employees of America (A. F. of L.) went on strike for system seniority to cover both streetcar and bus services and reduction in hours to spread employment. Terms of settlement included a 44-hour week and sole collective bargaining rights to the Amalgamated for bus drivers as well as streetcar men when the union can prove it has a majority. The union considers this to be a signal victory in its efforts to follow the present-day shift from streetcar to bus transportation.

TABLE 1.—*Strikes in April 1938, by Industry*

Industry	Beginning in April		In progress during April		Mandays idle during April
	Number	Workers involved	Number	Workers involved	
All industries.....	207	75,840	343	108,912	778,727
Iron and steel and their products, not including machinery.....	8	3,056	18	6,692	62,946
Blast furnaces, steel works, and rolling mills.....	3	1,336	5	3,687	40,474
Bolts, nuts, washers, and rivets.....	1	1	1	161	483
Cast-iron pipe and fittings.....	2	1,365	2	1,365	8,010
Plumbers' supplies and fixtures.....	1	1	1	105	1,050
Steam and hot-water heating apparatus and steam fittings.....	1	1	1	140	1,260
Stoves.....	2	325	3	375	4,900
Tin cans and other tinware.....	3	3	3	284	4,884
Wire and wire products.....	1	1	1	545	1,635
Other.....	1	30	1	30	150

TABLE 1.—*Strikes in April 1938, by Industry—Continued*

Industry	Beginning in April		In progress during April		Man-days idle during April
	Number	Workers involved	Number	Workers involved	
Machinery, not including transportation equipment	6	2,530	16	4,234	27,695
Agricultural implements	1	1,500	1	1,500	6,620
Electric machinery, apparatus, and supplies			3	820	9,581
Foundry and machine-shop products	1	138	4	322	5,417
Radios and phonographs			1	7	49
Other	4	882	7	1,585	6,028
Transportation equipment	14	19,798	14	19,798	52,564
Automobiles, bodies and parts	12	18,726	12	18,726	45,964
Shipbuilding	2	1,000	2	1,000	6,600
Nonferrous metals and their products	4	1,235	9	2,049	11,089
Brass, bronze, and copper products	1	759	3	1,310	4,346
Lighting equipment	1	210	1	210	2,100
Silverware and plated ware	1	160	2	246	2,126
Smelting and refining—copper, lead, and zinc			1	117	702
Stamped and enameled ware	1	106	2	166	1,815
Lumber and allied products	12	1,578	19	5,455	35,605
Furniture	5	254	6	310	3,579
Millwork and planing	1	337	3	726	9,489
Sawmills and logging camps	1	35	3	3,107	14,090
Other	5	952	7	1,312	8,447
Stone, clay, and glass products	8	439	13	1,186	21,107
Brick, tile, and terra cotta			2	550	12,700
Glass	1	51	3	73	672
Marble, granite, slate, and other products	6	338	7	513	7,635
Other	1	50	1	50	100
Textiles and their products	21	2,867	37	6,010	52,798
Fabrics:					
Carpets and rugs	1	165	1	165	990
Cotton goods	2	326	6	1,172	13,147
Dyeing and finishing textiles			1	120	3,120
Silk and rayon goods	1	36	1	36	72
Woolen and worsted goods	2	625	2	625	925
Other	3	176	5	1,120	3,731
Wearing apparel:					
Clothing, men's	2	93	2	93	1,739
Clothing, women's	5	313	10	611	6,002
Hats, caps, and millinery	2	113	3	124	1,312
Shirts and collars	1	132	2	262	2,216
Hosiery	2	908	2	908	6,612
Knit goods			1	165	330
Other			1	600	12,600
Leather and its manufactures	5	3,693	10	4,917	19,890
Boots and shoes	2	3,041	3	3,151	7,955
Leather	1	585	4	1,614	10,401
Other leather goods	2	67	3	152	1,534
Food and kindred products	14	9,114	20	10,749	71,461
Baking	4	338	5	385	3,058
Beverages			2	21	129
Butter	1	161	1	161	2,576
Canning and preserving	3	7,450	3	7,450	33,000
Confectionery	2	401	2	401	7,306
Flour and grain mills			2	115	1,846
Sugar refining, cane	1	672	2	2,124	22,344
Other	3	92	3	92	1,202
Tobacco manufactures	1	52	2	692	10,448
Cigars	1	52	2	692	10,448
Paper and printing	7	1,798	12	2,130	35,556
Boxes, paper	1	798	2	1,148	19,810
Printing and publishing:					
Book and job	2	25	2	25	92
Newspapers and periodicals	2	347	3	362	5,710
Other	2	556	5	595	9,944
Chemicals and allied products	1	35	6	248	4,699
Druggists' preparations			1	31	527
Fertilizers	1	35	1	35	140
Paint and varnishes			1	35	735
Other			3	247	3,297

TABLE 1.—*Strikes in April 1938, by Industry—Continued*

Industry	Beginning in April		In progress during April		Man-days idle during April
	Number	Workers involved	Number	Workers involved	
Rubber products.....	1	350	3	885	6,440
Other rubber goods.....	1	350	3	885	6,440
Miscellaneous manufacturing.....	5	680	12	6,685	127,090
Electric light, power, and manufactured gas.....	1	12	1	12	228
Broom and brush.....			2	53	455
Furriers and fur factories.....			2	5,550	115,568
Other.....	4	668	7	1,070	10,839
Extraction of minerals.....	7	4,365	8	4,830	22,028
Coal mining, anthracite.....	1	3,400	1	3,400	6,800
Coal mining, bituminous.....	4	765	5	1,230	11,805
Metalliferous mining.....	1	57	1	57	420
Quarrying and nonmetallic mining.....	1	143	1	143	3,003
Transportation and communication.....	17	7,327	26	7,605	33,406
Water transportation.....	4	1,122	5	1,171	2,236
Motortruck transportation.....	8	2,879	10	2,908	19,023
Motorbus transportation.....	1	103	2	119	1,240
Electric railroad.....	2	3,103	2	3,103	7,806
Taxicabs and miscellaneous.....	2	120	7	304	3,101
Trade.....	27	5,203	36	7,555	67,891
Wholesale.....	8	441	10	483	3,917
Retail.....	19	4,762	26	7,072	63,974
Domestic and personal services.....	11	1,407	17	1,593	19,539
Hotels, restaurants, and boarding houses.....	5	293	9	337	6,331
Laundries.....	3	564	3	564	10,420
Dyeing, cleaning, and pressing.....	2	50	2	50	66
Elevator and maintenance workers (when not attached to specific industry).....	1	500	2	512	512
Other.....			1	130	2,210
Professional service.....	3	456	4	482	1,820
Recreation and amusement.....	2	356	3	382	1,620
Professional.....	1	100	1	100	200
Building and construction.....	25	5,804	40	6,910	42,606
Buildings, exclusive of P. W. A.....	16	2,626	24	3,178	21,190
All other construction (bridges, docks, etc., and P. W. A. buildings).....	9	3,178	16	3,732	21,418
Agriculture and fishing.....	3	2,598	6	3,398	28,926
Agriculture.....	2	398	3	1,048	9,826
Fishing.....	1	2,200	2	2,300	17,800
Other.....			1	50	1,300
W. P. A., relief, and resettlement projects.....	6	1,529	10	2,295	13,237
Other nonmanufacturing industries.....	1	60	5	686	9,986

The largest number of strikes (34) beginning in April was in New York. Largely because of the automobile and streetcar strikes mentioned above, Michigan had the greatest number of workers involved in strikes. The greatest number of man-days idle during the month's strikes were in New York, Pennsylvania, California, Michigan, and Illinois, in the order named.

The strikes listed as interstate included two which spread over Kansas City, Mo., and Kansas City, Kans.; two motor-truck companies operating in several States; one against a New York hat firm with a branch in Connecticut; one against a linoleum company with branches in Philadelphia and Trenton. The seventh was an unsuccessful strike of sheep shearers for union recognition, centered mostly in California but extending into other western States.

TABLE 2.—Strikes in April 1938, by States

State	Beginning in April		In progress during April		Man-days idle during April
	Number	Workers involved	Number	Workers involved	
All States.....	207	75,840	343	106,912	778,727
Alabama.....	5	1,550	7	2,250	35,161
Arizona.....	2	266	2	266	1,162
Arkansas.....	1		1	20	520
California.....	12	8,086	23	10,047	67,056
Connecticut.....	3	245	5	937	3,479
Delaware.....	2		2	124	1,382
District of Columbia.....	1	10	4	225	3,457
Florida.....	1	158	1	158	1,106
Georgia.....	1	21	1	21	189
Illinois.....	12	4,276	20	6,029	41,193
Indiana.....	4	322	6	945	16,663
Iowa.....			2	49	400
Kansas.....	1	40	1	40	80
Louisiana.....	2	845	3	933	7,673
Maine.....	2	36	2	36	642
Maryland.....	2	550	2	550	9,200
Massachusetts.....	13	1,893	17	3,264	26,396
Michigan.....	19	20,984	24	21,328	63,340
Minnesota.....	8	893	12	1,625	21,525
Mississippi.....			1	165	330
Missouri.....	5	2,100	7	2,164	20,350
Montana.....	1	30	2	60	990
Nebraska.....	1	40	1	40	80
Nevada.....	1	350	1	350	1,400
New Hampshire.....	1	143	1	143	3,003
New Jersey.....	7	907	13	4,058	36,997
New Mexico.....			1	9	90
New York.....	34	8,779	70	17,004	187,063
North Carolina.....	5	642	6	769	4,777
North Dakota.....	1	25	1	25	175
Ohio.....	7	1,971	13	2,615	28,895
Oklahoma.....	1	30	2	131	887
Oregon.....	2	49	4	3,260	11,277
Pennsylvania.....	22	11,161	40	13,014	93,501
Rhode Island.....	1	40	1	40	840
South Carolina.....	1	32	2	207	3,739
Tennessee.....	4	707	6	983	7,822
Texas.....	1	1,200	2	1,293	2,720
Utah.....	1	32	2	47	475
Virginia.....	2	140	3	156	1,186
Washington.....	5	5,150	5	5,150	23,705
West Virginia.....	2	116	3	252	1,460
Wisconsin.....	11	1,598	14	2,008	15,810
Interstate.....	3	423	7	4,122	30,531

More than half (109) of the strikes beginning in April involved fewer than 100 workers. The average was 366 workers per strike. Only one, that at the Briggs Manufacturing Co., previously mentioned, involved more than 5,000 workers.

Nearly 45 percent of the strikes beginning in April were primarily over matters of union organization. Wages and hours were also issues in half of these. Almost one-fourth of the union organization strikes were for closed shop.

About 30 percent of all strikes, including 20 percent of all workers in strikes beginning in the month, were primarily over questions of wages and hours. An equal number of these were in protest against wage decreases and hour increases and against wage increases and decreases in hours.

Over 18 percent of the strikes, involving 38 percent of all workers, were due to disputes over seniority, work load, speed-up, and division

of work, payment of back wages, and other grievances directly affecting individual employees or particular groups of workers. The largest of these were the automobile and street-railway strikes referred to on pages 350 and 351.

TABLE 3.—*Strikes Beginning in April 1938, Classified by Number of Workers Involved*

Industry group	Total	Number of strikes in which the number of workers involved was—					
		6 and under 20	20 and under 100	100 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000
All industries.....	207	26	83	61	20	16	1
<i>Manufacturing</i>							
Iron and steel and their products, not including machinery.....	8		1	4	3		
Machinery, not including transportation equipment.....	6		2	2	1	1	
Transportation equipment.....	14			7	3	3	1
Nonferrous metals and their products.....	4			3	1		
Lumber and allied products.....	12	3	6	2	1		
Stone, clay, and glass products.....	8	1	6	1			
Textiles and their products.....	21	1	12	6	2		
Leather and its manufactures.....	5	1	2		1	1	
Food and kindred products.....	14	3	4	4	1	2	
Tobacco manufactures.....	1		1				
Paper and printing.....	7	2	1	3	1		
Chemical and allied products.....	1		1				
Rubber products.....	1			1			
Miscellaneous manufactures.....	5	1	1	3			
<i>Nonmanufacturing</i>							
Extraction of minerals.....	7		3	2	1	1	
Transportation and communication.....	17	1	5	7	2	2	
Trade.....	27	5	16	4		2	
Domestic and personal service.....	11	3	5	2	1		
Professional service.....	3	1		2			
Building and construction.....	25	3	14	5		3	
Agriculture and fishing.....	3			2		1	
W. P. A., relief, and resettlement projects.....	6	1	2	1	2		
Other nonmanufacturing industries.....	1		1				

TABLE 4.—*Major Issues Involved in Strikes Beginning in April 1938*

Major issues	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
All issues.....	207	100.0	75,840	100.0
Wages and hours.....	60	29.0	14,832	19.6
Wage increase.....	23	11.1	6,084	8.1
Wage decrease.....	27	13.0	6,386	8.5
Wage increase, hour decrease.....	7	3.4	945	1.2
Wage decrease, hour increase.....	2	1.0	17	(1)
Hour increase.....	1	.5	1,400	1.8
Union organization.....	93	44.9	20,390	26.9
Recognition.....	11	5.3	3,706	4.9
Recognition and wages.....	24	11.6	3,357	4.4
Recognition and hours.....	1	.5	1,598	2.1
Recognition, wages, and hours.....	28	13.6	5,386	7.2
Closed shop.....	21	10.1	3,142	4.1
Discrimination.....	3	1.4	850	1.1
Other.....	5	2.4	2,351	3.1
Miscellaneous.....	54	26.1	40,618	53.5
Sympathy.....	4	1.9	1,867	2.5
Rival unions or factions.....	8	3.9	9,333	12.3
Jurisdiction.....	4	1.9	733	1.0
Other.....	38	18.4	28,685	37.7

¹ Less than $\frac{1}{10}$ of 1 percent.

Over 36 percent of the 217 strikes terminating during the month lasted less than 1 week. Eleven had been in progress more than 3 months before settlements were reached or production resumed when a sufficient number of strikers returned to their jobs without a settlement or new persons were employed to fill vacancies of strikers. Most of these prolonged strikes were comparatively small, involving anywhere from 8 to 150 workers.

TABLE 5.—Duration of Strikes Ending in April 1938

Industry group	Total	Number of strikes with duration of—					
		Less than 1 week	1 week and less than ½ month	½ and less than 1 month	1 and less than 2 months	2 and less than 3 months	3 months or more
All industries.....	217	80	50	40	28	8	11
<i>Manufacturing</i>							
Iron and steel and their products, not including machinery.....	13	2	3	2	4	1	1
Machinery, not including transportation equipment.....	11	2	1	6	2		
Transportation equipment.....	9	7	2				
Nonferrous metals and their products.....	5	2		1	1	1	
Lumber and allied products.....	7		1	3	1	1	1
Stone, clay, and glass products.....	5	1		1	3		
Textiles and their products.....	26	10	6	6	1	1	2
Leather and its manufactures.....	7	1	3	1	1		1
Food and kindred products.....	11	4	4	1	2		
Tobacco manufactures.....	1	1					
Paper and printing.....	5	2	1	1	1		
Chemicals and allied products.....	4	1		2	1		
Rubber products.....	2	1	1				
Miscellaneous manufactures.....	4			1	2		1
<i>Nonmanufacturing</i>							
Extraction of minerals.....	5	3	2				
Transportation and communication.....	19	8	6	1	3	1	
Trade.....	23	9	5	4	1	1	3
Domestic and personal service.....	8	4	1	1	2		
Professional service.....	4	3				1	
Building and construction.....	34	12	10	7	2	1	2
Agriculture and fishing.....	4	2	1	1			
W. P. A., relief, and resettlement projects.....	8	4	3		1		
Other nonmanufacturing industries.....	2	1		1			

About an equal proportion of the strikes ending in April were settled directly by representatives of the unions and employers as with the help of Government conciliators and boards. A greater proportion of the large strikes, however, were settled without Government intervention, these including 54 percent of all workers involved in strikes, in contrast to 29 percent in which Government agencies aided in settlement.

About 15 percent of the strikes ended without formal settlement. Most of these strikes were lost when employers hired new workers to fill the strikers' places, moved or went out of business, or when individual strikers gradually resumed work on conditions laid down by the employer.

TABLE 6.—*Methods of Negotiating Settlements of Strikes Ending in April 1938*

Negotiations toward settlements carried on by—	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	217	100.0	69,271	100.0
Employers and workers directly.....	2	.9	490	.7
Employers and representatives of organized workers directly.....	89	41.0	37,398	54.0
Government conciliators or labor boards.....	91	42.0	19,872	28.7
Private conciliators or arbitrators.....	2	.9	144	.2
Terminated without formal settlement.....	33	15.2	11,367	16.4

About 44 percent of the strikes, involving approximately 32 percent of the workers involved in strikes ending in April, resulted in substantial gains to the workers. Slightly less than one-third, involving one-half of the workers, resulted in compromise settlements. About 18 percent, including 9 percent of the workers, brought little or no gains.

Almost 9 percent of all workers involved in strikes ending in the month were connected with jurisdictional disputes or disputes between rival unions. The largest of these was the strike of lumber workers in Portland, Oreg., where A. F. of L. and C. I. O. unions were in conflict.

TABLE 7.—*Results of Strikes Ending in April 1938*

Results	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	217	100.0	69,271	100.0
Substantial gains to workers.....	95	43.7	21,833	31.5
Partial gains or compromises.....	68	31.3	34,731	50.2
Little or no gains to workers.....	38	17.5	6,426	9.3
Jurisdiction, rival union, or faction settlements.....	14	6.5	6,124	8.8
Indeterminate.....	1	.5	57	.1
Not reported.....	1	.5	100	.1

Half of the strikes ending in April, in which the primary issue was that of union organization, were successful from the workers' point of view, and one-third were compromised. In some of these organization strikes questions of wages and hours were also involved. In strikes primarily over wages and hours, in which other issues were not important, 40 percent brought substantial gains and about an equal proportion resulted in compromise settlements. A larger proportion, almost half, of the strikes for wage increases were successful than those in protest against wage decreases. In the latter, 9 were successful in staving off decreases, 10 were compromised, and 7 were unsuccessful.

In the union organization disputes the smaller strikes, on the average, were less successful than the larger. Strikes involving half of the total workers involved in all union organization disputes were success-

ful; partial gains were obtained in strikes involving 40 percent of the workers; whereas the 16 percent of the strikes, which involved only 8 percent of all workers in organization disputes, were unsuccessful.

TABLE 8.—Results of Strikes Ending in April 1938, in Relation to Major Issues Involved

Major issues	Total	Strikes resulting in—					
		Substantial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdiction, rival union, or faction settlements	Indeterminate	Not reported
Number of strikes							
All issues.....	217	95	68	38	14	1	1
Wages and hours.....	68	27	25	15			1
Wage increase.....	28	13	9	6			
Wage decrease.....	26	9	10	7			
Wage increase, hour decrease.....	11	4	4	2			1
Wage decrease, hour increase.....	1		1				
Hour increase.....	1		1				
Hour decrease.....	1	1					
Union organization.....	100	51	33	16			
Recognition.....	13	7	2	4			
Recognition and wages.....	22	12	9	1			
Recognition and hours.....	1	1					
Recognition, wages, and hours.....	34	20	9	5			
Closed shop.....	21	8	8	5			
Discrimination.....	6	1	4	1			
Other.....	3	2	1				
Miscellaneous.....	49	17	10	7	14	1	
Sympathy.....	3	2				1	
Rival unions or factions.....	7				7		
Jurisdiction.....	7				7		
Other.....	32	15	10	7			
Number of workers involved							
All issues.....	69, 271	21, 833	34, 731	6, 426	6, 124	57	100
Wages and hours.....	13, 361	2, 582	6, 976	3, 703			100
Wage increase.....	5, 241	1, 019	2, 216	2, 006			
Wage decrease.....	5, 527	1, 195	2, 868	1, 464			
Wage increase, hour decrease.....	938	163	442	233			100
Wage decrease, hour increase.....	50		50				
Hour increase.....	1, 400		1, 400				
Hour decrease.....	205	205					
Union organization.....	22, 477	11, 450	9, 123	1, 904			
Recognition.....	3, 160	2, 330	212	618			
Recognition and wages.....	2, 341	1, 300	1, 032	9			
Recognition and hours.....	1, 598	1, 598					
Recognition, wages, and hours.....	9, 211	5, 598	3, 236	377			
Closed shop.....	2, 853	529	1, 452	672			
Discrimination.....	1, 234	15	1, 191	28			
Other.....	2, 080	80	2, 000				
Miscellaneous.....	33, 433	7, 801	18, 632	819	6, 124	57	
Sympathy.....	1, 807	1, 750				57	
Rival unions or factions.....	5, 255				5, 255		
Jurisdiction.....	869				869		
Other.....	25, 502	6, 051	18, 632	819			

ACTIVITIES OF UNITED STATES CONCILIATION SERVICE, JUNE 1938

THE United States Conciliation Service, in June, disposed of 423 situations involving 230,325 workers. These matters were brought

to the attention of the Service by employees, employers, and other interested parties desiring the services of this agency.

Labor disputes such as strikes, threatened strikes, lock-outs, and controversies accounted for 254 situations involving 191,914 workers. The remaining 169 situations involving 38,411 workers included services rendered such as arbitrations, conferences regarding labor conditions, and the adjustment of miscellaneous complaints.

The facilities of the Conciliation Service during June were utilized in 41 States and the District of Columbia as shown in table 1.

Table 2 shows the activities of the Service were used in 25 major industrial fields such as agriculture, automobiles, building trades, foods, maritime, textiles, and others.

TABLE 1.—Situations Disposed of by Conciliation Service, June 1938, by States

State	Disputes		Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
United States.....	254	191,914	169	38,411	423	230,325
Alabama.....	7	3,991	8	358	15	4,349
Arizona.....			1	1	1	1
Arkansas.....	1	25			1	25
California.....	7	8,997	15	154	22	9,151
Colorado.....	33	1,160	1	3	34	1,163
Connecticut.....	4	830	2	161	6	991
District of Columbia.....	7	2,215	19	30	26	2,245
Florida.....	3	4,032	1	1	4	4,033
Georgia.....	2	2,339	1	875	3	3,214
Idaho.....	2	82			2	82
Illinois.....	10	5,084	6	11	16	5,095
Indiana.....	9	1,575	3	2,952	12	4,527
Iowa.....	2	2,266			2	2,266
Kentucky.....	2	65			2	65
Louisiana.....	5	1,524	4	6	9	1,530
Maine.....	1	40			1	40
Maryland.....	1	310			1	310
Massachusetts.....	7	12,697	21	25,295	28	37,992
Michigan.....	2	479	1	1	3	480
Minnesota.....	12	4,168	3	177	15	4,345
Missouri.....	6	2,310	1	3	7	2,313
Montana.....	2	47	1	1	3	48
Nevada.....	1	80			1	80
New Hampshire.....			2	462	2	462
New Jersey.....	7	6,950	5	398	12	7,378
New York.....	10	3,526	18	329	28	3,855
North Carolina.....	4	1,649	5	5	9	1,654
North Dakota.....	1	473			1	473
Ohio.....	24	24,260	6	6	30	24,266
Oklahoma.....	1	50			1	50
Oregon.....	2	2,960	1	1	3	2,961
Pennsylvania.....	34	16,577	17	1,387	51	17,964
Rhode Island.....	10	6,902	12	5,221	22	12,123
South Carolina.....	3	2,925	3	9	6	2,934
South Dakota.....	1	123			1	123
Tennessee.....	3	310			3	310
Texas.....	3	222	2	201	5	423
Virginia.....	3	2,092	1	350	4	2,442
Washington.....	8	57,657	3	7	11	57,664
West Virginia.....	2	5,037	2	2	4	5,039
Wisconsin.....	12	5,846	3	3	15	5,849
Wyoming.....			1	1	1	1

TABLE 2.—*Situations Disposed of by Conciliation Service, June 1938, by Industries*

Industry	Disputes		Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
All industries.....	254	191,914	169	38,411	423	230,325
Agriculture.....	4	1,245	1	1	5	1,246
Automobile.....	51	7,658	4	8	55	7,666
Building trades.....	21	2,983	12	18	33	3,001
Chemicals.....	3	1,160	2	13	5	1,173
Communications.....			3	153	3	153
Domestic and personal services.....	9	1,226	2	2	11	1,228
Food.....	26	73,103	15	382	41	73,485
Iron and steel.....	14	8,583	2	2	16	8,585
Leather.....	3	1,912	3	8	6	1,920
Lumber and furniture.....	14	7,541	1	1	15	7,542
Machinery.....	11	5,851	7	106	18	5,957
Maritime.....	9	6,965	5	755	14	7,720
Mining.....	2	119	4	4	6	123
Motion pictures.....			2	2	2	2
Nonferrous metals.....			2	2	2	2
Paper and printing.....	10	3,429	2	2	12	3,431
Petroleum.....	2	900	2	3,150	4	4,050
Professional services.....	2	1,610	3	3	5	1,613
Rubber.....	4	19,173	5	7	9	19,180
Stone, clay, and glass.....	6	805	1	3	7	808
Textile.....	39	38,186	51	33,480	90	71,666
Tobacco.....			1	6	1	6
Trade.....	11	3,798	4	38	15	3,836
Transportation.....	9	2,952	10	240	19	3,192
Utilities.....	1	1,400			1	1,400
Unclassified.....	3	1,315	25	25	28	1,340

NUMBER OF SIT-DOWN STRIKES IN 1937

ONE of every 10 strikes occurring in the United States in 1937 was a so-called "sit-down" strike, in which all or part of the workers involved remained at their places of work for one or more working days after stopping work. The number of these sit-down strikes was 477 out of a total of 4,740.¹ In 1936 the number of such strikes was 48 out of a total of 2,172.² There were numerous sit-down strikes, which lasted only a few hours until settlements were agreed upon and work resumed, but the number of these is not known, as the Bureau keeps no record of strikes lasting less than 1 day. There were other cases where the strike continued but the workers left the plant after sitting down only a few hours; since these differ little from the usual walk-out or lock-out they are not included as sit-down strikes.

In the 477 strikes in which the sit-down or stay-in features lasted for a day or more, there were 398,117 workers involved. It is estimated, however, that only one-third of these workers actually stayed in the plants.

In 293 of the 477 strikes all or part of the workers stayed in the plants after working hours. In some instances, all of the workers involved stayed; in others, most of them walked out and left only a

¹ See Monthly Labor Review, May 1938, p. 1186, for analysis of all strikes occurring in 1937.

² Idem, May 1937, p. 1233, for further data on 1936 sit-down strikes.

small number inside; in still others the workers reported for "sit-down" duty in shifts. There were 302,406 workers involved in these 293 strikes, although less than a third of them actually took part in the "sit-down."

In some cases the workers stayed in the plants for only a few days and then voluntarily walked out and established picket lines. In some, employers obtained court injunctions compelling the strikers to evacuate the plants. In other instances the strikers remained in the plants for several weeks until settlements were reached. What appears to be the longest stay-in strike occurred at a cigar factory in New York City where more than 100 workers stayed in the plant for 149 days—from April to September.

Sit-down strikes were at their height in March 1937, when 170 occurred. Toward the end of the year they dwindled in number and almost disappeared. The 477 sit-down strikes occurring during the whole year are distributed by months in table 1.

TABLE 1.—*Distribution of Sit-Down Strikes and Workers Involved, in 1937, by Months*

Month	Number of strikes	Number of workers involved ¹	Month	Number of strikes	Number of workers involved ¹
January.....	25	74,479	July.....	20	4,721
February.....	47	31,236	August.....	23	6,020
March.....	170	167,210	September.....	13	3,163
April.....	52	33,339	October.....	10	8,747
May.....	72	25,250	November.....	12	24,791
June.....	29	18,804	December.....	4	357

¹ These figures include the total number of workers involved in the strikes. Only a portion of them actually participated in the sit-down.

Unions affiliated with the Committee for Industrial Organization were involved in 279 of the 477 sit-down strikes; American Federation of Labor unions were involved in 100; both C. I. O. and A. F. of L. unions were involved in 12 of 16 rival union disputes, in which the C. I. O. unions called sit-down strikes in opposition to the A. F. of L. Of the 4 remaining rival union strikes, 2 were called by unaffiliated unions in opposition to the A. F. of L., one by an unaffiliated union in opposition to the C. I. O., and one by an A. F. of L. union in opposition to an unaffiliated organization. Unaffiliated unions only were involved in 20 of these sit-down strikes, and company unions in 6. In 55 no union was involved and in one the type of union involved is unknown.

Causes and Results of Sit-Down Strikes

An analysis of causes and results of the sit-down strikes in 1937 showed no great differences from those of other strikes. Wages and hours were the major issues in 29.4 percent of the sit-down strikes, as

compared with 29.9 percent of all strikes. Union organization matters were the major issues in 53.4 percent as compared with 57.8 percent of all strikes. Miscellaneous matters, including disputes between rival unions and factions, sympathy strikes and specific grievances over working conditions were the major issues in 17.2 percent of the sit-down strikes, as compared with 12.3 percent of all strikes.

The workers obtained substantial gains as a result of 50.8 percent of the sit-downs, as compared with 46.4 percent of all strikes; compromises were secured in 30.6 percent as compared with 31.8 percent of all strikes; and little or no gains were obtained as a result of 14 percent of the sit-downs as compared with 17.3 percent of all strikes in 1937.

Industries Affected

The largest number of sit-down strikes was in the textile industries, where 80 of the 477 occurred. There were 51 in the transportation equipment industries, 45 of this number being in automobile and parts plants. A distribution of the 477 strikes according to industry groups appears in table 2.

TABLE 2.—Sit-Down Strikes in 1937, by Industry Groups ¹

Industry group	Number	Industry group	Number
Total.....	477	Paper and printing.....	24
Iron and steel and their products, not including machinery.....	32	Chemicals and allied products.....	10
Machinery, not including transportation equipment.....	26	Rubber products.....	10
Transportation equipment.....	51	Miscellaneous manufacturing.....	25
Nonferrous metals and their products.....	17	Extraction of minerals.....	3
Lumber and allied products.....	13	Transportation and communication.....	45
Stone, clay, and glass products.....	6	Trade.....	25
Textiles and their products.....	80	Domestic and personal service.....	25
Leather and its manufactures.....	21	Professional service.....	7
Food and kindred products.....	19	Building and construction.....	3
Tobacco manufactures.....	13	Agriculture, etc.....	2
		W. P. A., relief, and resettlement projects.....	11
		Other nonmanufacturing industries.....	9

¹ Includes only the strikes in which all or part of the workers involved remained in the plants for an entire day or more after stopping work.

Wages and Hours of Labor

HOURLY EARNINGS IN RADIO MANUFACTURING, AUGUST 1937¹

Summary

BROADLY speaking, the radio industry embraces the manufacture of receiving and transmitting apparatus as well as the broadcasting of programs and the transmission of messages. The Bureau of Labor Statistics' survey of earnings in the industry, however, was restricted to establishments engaged in the manufacture of receiving sets, receiving-set parts (except cabinets), and radio-receiving tubes. It covered neither establishments engaged in the manufacture of transmitting apparatus nor of amplifier and sound equipment; neither did it cover the broadcasting and transmitting branches of the industry.

The manufacture of radio receivers (including parts and tubes) is essentially an industry of semiskilled workers. Taking the industry as a whole, more than two-thirds of the workers are semiskilled, the proportion varying from one division of the industry to another. In the manufacture of receiving tubes, about 80 percent of the workers were semiskilled, as against 69 percent in establishments manufacturing parts, and 63 percent in those making receiving sets.

It is also significant that women constitute a large proportion of the industry's working force. Of the 28,555 workers for which information was obtained, 16,613 (58 percent) were females. Here again, however, there were marked differences in the various divisions of the industry. In the manufacture of sets somewhat less than half the employees were females, but female workers constituted 56 percent of the employees of plants manufacturing parts and 81 percent of the employees in the tubes division. Furthermore, most of the female employees were in the semiskilled and unskilled occupational groups, only 5 percent being classed as skilled.

The average hourly earnings for the industry were 54.1 cents in August 1937 (table 1). No general average, however, gives an accurate perspective of the earnings of most of the workers who are employed by the industry. Not only do earnings vary widely be-

¹ Prepared by J. Perlman, O. R. Mann, D. L. Helm, and H. O. Rogers of the Division of Wages, Hours, and Working Conditions, Bureau of Labor Statistics.

tween branches, but there are likewise sharp variations between plants in the same branch. Hourly earnings were found to be highest in the sets branch of the industry, where the average in August 1937 was 60.9 cents. But this figure represents a composite of individual plant averages ranging from less than 40 cents to more than 65 cents an hour.

In the parts branch of the industry hourly earnings averaged 47.9 cents an hour, but the individual plant averages ranged from less than 35 cents to over 60 cents. In the tubes branch of the industry, the average hourly earnings in August 1937 were precisely the same as in the parts division, whereas the range by plants was from 35.9 to 57.9 cents an hour.

TABLE 1.—Average Hourly Earnings of Radio Workers, by Sex, Skill, and Branch of Industry, August 1937

Sex and skill	Total industry	Sets	Parts	Tubes
All employees.....	\$0. 541	\$0. 609	\$0. 479	\$0. 479
Skilled.....	. 725	. 752	. 600	. 716
Semiskilled.....	. 513	. 581	. 464	. 455
Unskilled.....	. 472	. 531	. 406	. 428
Males.....	. 642	. 696	. 545	. 637
Skilled.....	. 770	. 784	. 729	. 768
Semiskilled.....	. 605	. 677	. 513	. 564
Unskilled.....	. 528	. 577	. 443	. 512
Females.....	. 459	. 504	. 418	. 439
Skilled.....	. 500	. 523	. 477	. 495
Semiskilled.....	. 464	. 510	. 424	. 444
Unskilled.....	. 419	. 473	. 378	. 373

Analysis of the data indicated that in the sets branch the highest averages were paid by two of the largest manufacturers. In neither the parts nor the tubes branches was size of plant a noticeable factor in wage levels. In none of the branches did the geographical location appear to have much influence on hourly earnings.

Method and Scope of Survey

In view of the size of the industry, it was not feasible for the Bureau to attempt a complete canvass of each establishment engaged in the manufacture of radio sets, parts, and tubes. For this reason, the inquiry was confined to 59 plants so selected as to afford an accurate cross section of each branch of the industry.

The wage earners covered in these establishments numbered 28,555, or approximately half the estimated total number of workers engaged in the industry as defined in this survey.² Of the workers for whom

² The Census of Manufactures classification of "Radio apparatus and phonographs" includes all establishments engaged primarily in the manufacture of "all kinds of radio apparatus, including tubes, for transmitting and receiving; all kinds of machines for mechanically recording or reproducing speech, music, or other sounds; combination radios and phonographs, parts and supplies, such as mechanical parts, record blanks, and records." The present study differs from the Census classification in that it does not include the manufacture of transmitting apparatus and amplifier and sound equipment. Moreover, workers employed in the manufacture of phonographs alone were not covered although those workers employed in the manu-

data were obtained, 4,329 were skilled, 19,576 were semiskilled, and 4,650 were unskilled. The workers covered in the manufacture of radio sets numbered 14,360—2,791 skilled, 9,095 semiskilled, and 2,474 unskilled. The 7,918 in the radio-parts branch included 966 skilled, 5,431 semiskilled, and 1,521 unskilled. In the manufacture of tubes there were 572 skilled, 5,050 semiskilled, and 655 unskilled workers covered.

Of the 59 plants for which information was obtained, 24 with 14,360 employees manufactured complete radio receiving sets, 27 with 7,918 employees made radio parts only, and 8 with 6,277 employees manufactured radio tubes only. However, the manufacturers of sets also make numerous parts for original and replacement uses.

Size of plant was considered in selecting the sample to be covered in the survey. Of the 59 establishments scheduled, 1 employed between 6 and 20 workers, 6 between 21 and 50, 4 between 51 and 100, 13 between 101 and 250, 7 between 251 and 500, 12 between 501 and 1,000, 11 between 1,001 and 2,500, and 5 over 2,500 workers. Many of these plants also manufactured products classified under other industries, but this survey included only those units that were primarily engaged in the making of radio sets, parts, and tubes. Nearly all of the large establishments in the industry were covered, but in order to maintain the proper balance between large and small plants in the sample, the representation of the large plants was reduced 50 percent.

In the selection of the sample, care was also exercised to obtain representative geographical distribution. In all, information was obtained from establishments located in 11 States—Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Ohio, Michigan, Indiana, Illinois, and Kentucky.

Another factor considered in the selection of the sample was unionization. Of the 59 plants included, 27 were operating at the time of the survey under an oral or written agreement with either the United Electrical and Radio Workers of America or the International Brotherhood of Electrical Workers, and 6 other establishments dealt with independent unions. Organization of the workers was farther advanced in some areas, notably in the Eastern States, than in others.

The data obtained in this survey included wages and hours of work, annual earnings, occupational descriptions, and certain general plant information. All information was collected by field representatives of the Bureau from plant pay rolls and other records. The data for each employee included occupation, sex, method of wage payment, total hours actually worked, and total earnings, as of a pay-roll period in August 1937. Higher supervisory and office workers were not included.

Manufacture of combined radio and phonograph sets were included. The Census includes both groups. On the other hand, workers employed in the manufacture of some radio parts, such as coils, transformers, and condensers, which the Bureau of the Census groups with the electrical machinery and apparatus industry, have been included in this survey.

The August pay-roll period was selected primarily because in years of normal business activity in the industry this month is one of moderately good volume. Ordinarily, August is neither a month of peak production nor the low point of the year. For a number of plants, there were also obtained for each worker the number of pay-roll periods worked and total earnings for the calendar year 1936.

Classifications according to skill were made after consultation with company officials.

For each plant general information was collected as to the products manufactured, the full-time or scheduled hours of work, overtime rates, methods of wage payment, and employer-employee relations.

The present report is limited to an analysis of the data on average hourly earnings. Information relating to weekly hours and earnings, annual earnings, and occupational descriptions will be incorporated in a general bulletin to be issued later.

Hourly Earnings in Manufacture of Radio Sets

DIFFERENCES AMONG INDIVIDUAL PLANTS

In the radio-sets branch of the industry, there were found to be wide differences in average hourly earnings. For the branch as a whole, earnings in August 1937 averaged 60.9 cents an hour, but individual plant averages ranged from less than 40 cents in 2 establishments to more than 65 cents in 2 plants. Between those extremes, 10 plants averaged 45 and under 50 cents, 6 plants 50 and under 55, 2 plants 55 and under 60, and 2 plants slightly more than 60 cents.

Hourly earnings in the plants of two of the largest producers considered together averaged 73.1 cents. No other establishment in the industry averaged more than 61 cents. Of the 6 other plants with more than 1,500 employees, 4 reported average hourly earnings of from 59 to 61 cents^a and 2 reported average earnings from 50 to 55 cents. None of the smaller and medium-sized establishments showed an average of as much as 55 cents. Of the other plants in which earnings averaged from 50 to 55 cents, 2 had between 500 and 1,000 and 2 had fewer than 100 employees. Of the 12 plants in which the average earnings were less than 50 cents, 2 had between 500 and 1,000, 5 had between 100 and 500, and 5 had fewer than 100 workers.

Geographical location appeared to have little bearing on hourly earnings in the sets division of the industry. It is true that in one area, namely New York City, earnings showed a tendency to cluster within a narrow range. The average earnings reported by the nine sets plants covered in that locality had a spread of only 4.5 cents, from 45.7 to 50.2 cents an hour; and in two-thirds of the plants the variation was only from 45.7 to 47.7 cents. This comparative

^a These establishments were widely distributed geographically, and 3 of them were union plants and 1 was a nonunion establishment.

uniformity, however, disappeared when broader geographical groupings were used. The whole group of plants covered on the Atlantic seaboard (including those in New York City) showed a range of over 40 cents an hour between the highest and lowest plant averages. In the 10 plants covered in the Middle Western region, plant averages ranged from 38.7 to 61.4 cents an hour, a spread of 22.7 cents; the Chicago plants (included within these figures) had a range of only 8.2 cents. Of the 24 sets plants covered, 15 had an agreement with an affiliated trade-union at the time of the survey. Among those establishments, one averaged over 65 cents, two averaged 60 and under 65, one averaged 55 and under 60, four averaged 50 and under 55, and seven averaged 45 and under 50 cents per hour. Among the nine other plants, one had an average of over 65 cents, one of 55 and less than 60, two of 50 and less than 55, three of 45 and less than 50, and two of less than 40 cents.

One factor of real importance in determining hourly earnings appeared to be the sharp variations in the composition of the working force of the individual plants. Semiskilled workers were the dominant group in the sets branch of the industry, forming 63.4 percent of the total labor force.

As might be expected, the composition of the labor force according to skill varied considerably between plants. In one establishment, for example, more than a third of the workers employed were in occupations generally regarded as skilled, and in six other plants skilled workers accounted for approximately a fourth of the wage earners. At the other extreme, one establishment indicated that only one-tenth of its workers were skilled, and in three other plants the skilled employees comprised less than 15 percent of the working force. Still more striking variations were shown in the proportion of semiskilled workers. In eight plants, three-quarters or more of the workers were classed as semiskilled, and in half of the plants at least two-thirds of the workers were semiskilled. In two of the establishments, on the other hand, only slightly more than a third of the employees were in the semiskilled class. There were no unskilled employees in one establishment, and the proportions were less than 10 percent in six, 10 to 20 percent in nine, 20 to 30 percent in six, and over 30 percent in two plants.⁴

In five establishments, male workers were employed exclusively, and in two other plants more than four-fifths of the wage earners were males. At the other extreme, there was one plant where nearly three-fourths of the labor force was composed of female employees, and in five other establishments approximately two-thirds of the employees were women. Moreover, the proportion of males and females in each skill varied considerably from one plant to another.

⁴ It should be noted, however, that no correlation was found between size of establishment and the composition of the labor force by skill.

Considerable variation was shown when the plant averages for each sex and skill group were analyzed. This was especially noticeable in the averages for male employees; the spread in average earnings in the various plants was less marked for female employees.

EARNINGS OF EMPLOYEES, BY SEX AND SKILL

The total distribution of average hourly earnings in August 1937 for all scheduled companies making radio sets is shown in table 2.

Hourly earnings for all employees combined ranged from 32.5 cents to \$1.10 an hour, more than 98 percent of the workers being found within this range. Such massing as occurred was in the 15-cent spread from 42.5 to 57.5 cents. Although this earnings group accounted for more than a third (36.1 percent) of the workers, over a fourth (25.6 percent) were earning from 57.5 to 72.5 cents, and almost another fourth (23.6 percent) earned more than 72.5 cents. On the other hand, about a seventh (14.7 percent) averaged less than 42.5 cents.

Sharp differences were shown on the basis of sex and skill. For all males, the average hourly earnings were 78.4 cents for skilled, 67.7 cents for semiskilled, and 57.7 cents for unskilled. Between skilled and semiskilled workers the difference in hourly earnings was 10.7 cents, or only slightly more than between the semiskilled and unskilled employees. The margins in earnings, by skill, for the females were considerably smaller, the averages being 52.3 cents for skilled, 51.0 cents for semiskilled, and 47.3 cents for unskilled. On the other hand, there were wide differences between the earnings of male and female workers in jobs rated as calling for the same general degree of skill. These differences in favor of male workers amounted to 26.1 cents for skilled, 16.7 cents for semiskilled, and 10.4 cents for unskilled employees.

Table 2 reveals a general tendency for the hourly earnings of skilled male employees to concentrate in the upper earnings groups. Thus, the earnings of considerably more than half (55.6 percent) of these workers exceeded 77.5 cents an hour. In the semiskilled male group, there was a conspicuous concentration in the 15-cent range of 67.5 and under 82.5 cents, this interval alone accounting for considerably more than a third (35.7 percent) of the employees. For unskilled males, the largest group (48.3 percent) was in the 15-cent range of 52.5 and less than 67.5 cents.

A feature of the distributions for female workers was the appreciable narrowing of the range of hourly earnings. However, the tendency of earnings to concentrate at several different levels was just as pronounced as was the case for males. This was particularly true of the skilled and unskilled groups.

TABLE 2.—Distribution of Radio Workers Making Sets, by Average Hourly Earnings, Skill, and Sex, August 1937

Average hourly earnings	All		Skilled		Semiskilled		Unskilled	
	Number of employees	Per cent	Number of employees	Per cent	Number of employees	Per cent	Number of employees	Per cent
<i>Both sexes</i>								
22.5 and under 27.5 cents	65	0.5	1	(1)	61	0.7	4	0.2
27.5 and under 32.5 cents	76	.5	1		41	.5	34	1.4
32.5 and under 37.5 cents	1,007	7.0	56	2.0	611	6.7	340	13.7
37.5 and under 42.5 cents	966	6.7	69	2.5	669	7.4	228	9.2
42.5 and under 47.5 cents	1,622	11.3	90	3.2	1,096	12.0	436	17.6
47.5 and under 52.5 cents	2,081	14.4	167	6.0	1,622	17.7	292	11.8
52.5 and under 57.5 cents	1,487	10.4	252	9.0	974	10.7	261	10.5
57.5 and under 62.5 cents	1,405	9.8	172	6.2	967	10.6	266	10.8
62.5 and under 67.5 cents	1,410	9.8	189	6.8	869	9.6	352	14.2
67.5 and under 72.5 cents	856	6.0	227	8.1	506	5.6	123	5.0
72.5 and under 77.5 cents	896	6.2	210	7.5	623	6.8	63	2.5
77.5 and under 82.5 cents	702	4.9	251	9.0	400	4.4	51	2.1
82.5 and under 87.5 cents	562	3.9	334	11.9	219	2.4	9	.4
87.5 and under 92.5 cents	425	3.0	295	10.6	124	1.4	6	.2
92.5 and under 100.0 cents	370	2.6	225	8.1	138	1.5	7	.3
100.0 and under 110.0 cents	303	2.1	159	5.7	142	1.6	2	.1
110.0 and under 120.0 cents	101	.7	73	2.6	28	.3		
120.0 cents and over	26	.2	21	.8	5	.1		
Total	14,360	100.0	2,791	100.0	9,095	100.0	2,474	100.0
<i>Males</i>								
22.5 and under 27.5 cents	26	.4			22	.6	4	.3
27.5 and under 32.5 cents	19	.3			16	.4	3	.2
32.5 and under 37.5 cents	166	2.3	24	1.0	49	1.3	93	7.5
37.5 and under 42.5 cents	175	2.4	44	1.8	59	1.6	72	5.8
42.5 and under 47.5 cents	453	6.2	33	1.4	294	8.1	126	10.1
47.5 and under 52.5 cents	613	8.4	86	3.5	413	11.3	114	9.2
52.5 and under 57.5 cents	621	8.5	184	7.6	269	7.4	168	13.5
57.5 and under 62.5 cents	594	8.1	141	5.8	253	6.9	200	16.1
62.5 and under 67.5 cents	715	9.7	159	6.5	325	8.9	231	18.7
67.5 and under 72.5 cents	700	9.5	214	8.8	388	10.6	98	7.9
72.5 and under 77.5 cents	786	10.6	194	8.0	532	14.6	60	4.8
77.5 and under 82.5 cents	679	9.3	247	10.2	383	10.5	49	3.9
82.5 and under 87.5 cents	554	7.6	334	13.7	211	5.8	9	.7
87.5 and under 92.5 cents	425	5.8	295	12.1	124	3.4	6	.5
92.5 and under 100.0 cents	369	5.0	224	9.2	138	3.8	7	.6
100.0 and under 110.0 cents	303	4.1	159	6.5	142	3.9	2	.2
110.0 and under 120.0 cents	101	1.4	73	3.0	28	.8		
120.0 cents and over	26	.4	21	.9	5	.1		
Total	7,325	100.0	2,432	100.0	3,651	100.0	1,242	100.0
<i>Females</i>								
22.5 and under 27.5 cents	39	.6			39	.7		
27.5 and under 32.5 cents	57	.8	1	0.3	25	.5	31	2.5
32.5 and under 37.5 cents	841	12.0	32	8.9	562	10.3	247	20.0
37.5 and under 42.5 cents	791	11.2	25	7.0	610	11.2	156	12.7
42.5 and under 47.5 cents	1,169	16.6	57	15.9	802	14.7	310	25.3
47.5 and under 52.5 cents	1,468	20.9	81	22.5	1,209	22.2	178	14.4
52.5 and under 57.5 cents	806	12.3	68	18.9	705	13.0	93	7.5
57.5 and under 62.5 cents	811	11.5	31	8.6	714	13.1	66	5.4
62.5 and under 67.5 cents	695	9.9	30	8.4	544	10.0	121	9.8
67.5 and under 72.5 cents	156	2.2	13	3.6	118	2.2	25	2.0
72.5 and under 77.5 cents	110	1.6	16	4.5	91	1.7	3	.2
77.5 and under 82.5 cents	23	.3	4	1.1	17	.3	2	.2
82.5 cents and over	9	.1	1	.3	8	.1		
Total	7,035	100.0	359	100.0	5,444	100.0	1,232	100.0

(1) Less than 1/10 of 1 percent.

Earnings by type of company.—Of the 14,360 workers covered in the sets branch of the industry, approximately 40 percent were employed by two companies paying average earnings substantially higher than in the rest of the industry. The workers in this important segment

of sets manufacturing (referred to hereafter as group A) averaged 73.1 cents an hour. This figure is exactly 20 cents higher than the average (53.1 cents) for the plants in group B (the remainder of the plants in this branch of the industry).

The contrast in wages between these two groups of producers is even more striking when one considers the figures in table 3. Considering the totals for each group, it will be seen that, although for all practical purposes 47.5 cents an hour was the effective minimum for the group A producers, as many as 43.0 percent of the employees in group B earned under that figure. In fact, only a relatively small portion of the labor force (14.5 percent) were paid under 57.5 cents in group A, but three-fourths of the employees in the remainder of the industry received less than that amount. As many as 45.4 percent of those working for group A producers earned 72.5 cents (which was just below the average for this group) or above, as compared with only about one-tenth (9.2 percent) of the employees in group B.

TABLE 3.—Percentage Distribution of Radio Workers Making Sets, by Average Hourly Earnings, Type of Company, and Skill, August 1937

Average hourly earnings	Group A plants				Group B plants			
	All	Skilled	Semi-skilled	Unskilled	All	Skilled	Semi-skilled	Unskilled
22.5 and under 27.5 cents.....					0.7		1.2	0.2
27.5 and under 32.5 cents.....					.9	0.1	.8	2.0
32.5 and under 37.5 cents.....					11.6	3.3	11.5	20.2
37.5 and under 42.5 cents.....					11.1	4.1	12.6	13.5
42.5 and under 47.5 cents.....	0.1		0.1		18.7	5.3	20.6	25.8
47.5 and under 52.5 cents.....	4.7	0.1	5.6	7.0	21.0	9.8	26.5	14.1
52.5 and under 57.5 cents.....	9.7	1.0	12.5	8.6	10.8	14.4	9.4	11.4
57.5 and under 62.5 cents.....	15.0	.9	18.3	18.4	6.4	9.6	5.1	7.2
62.5 and under 67.5 cents.....	17.1	2.5	17.1	38.2	5.0	9.5	4.2	3.0
67.5 and under 72.5 cents.....	8.0	3.0	8.7	11.5	4.6	11.5	3.3	1.9
72.5 and under 77.5 cents.....	11.6	7.5	13.7	7.2	2.7	7.5	2.0	.4
77.5 and under 82.5 cents.....	9.4	12.7	9.1	6.3	1.9	6.6	1.1	.1
82.5 and under 87.5 cents.....	7.6	21.7	4.8	.9	1.5	5.5	.7	.1
87.5 and under 92.5 cents.....	6.0	20.2	2.9	.8	1.0	4.3	.3	
92.5 and under 100.0 cents.....	5.1	14.8	3.2	.8	.9	3.7	.3	.1
100.0 and under 110.0 cents.....	4.1	9.0	3.5	.3	.8	3.6	.2	
110.0 and under 120.0 cents.....	1.3	5.2	.4		.3	.9	.2	
120.0 cents and over.....	.3	1.4	.1		.1	.3	(¹)	
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Less than 1/10 of 1 percent.

Any comparison on the basis of the combined figures, of course, is affected by differences in the composition of the labor force as to sex and skill. Group A producers employed a larger proportion of males than the other companies, the proportions being 60.9 percent males and 39.1 percent females for the group A companies and 44.5 percent males and 55.5 percent females for the other companies. Both types of companies had exactly the same proportion (19.4 percent) of skilled workers. Group A producers, however, employed relatively more semiskilled and fewer unskilled wage earners than the remainder of the industry.

The average hourly earnings differences in favor of group A companies over the remainder of the industry for each sex-skill group may be calculated from table 4. The differences in earnings were greater for males than for females. For male employees, they amounted to 20.2 cents for skilled, 20.5 cents for semiskilled, and 16.0 cents for unskilled. For females, they were 16.0 cents for skilled, 14.9 cents for semiskilled, and 19.1 cents for unskilled.

TABLE 4.—Average Hourly Earnings of Radio Workers Making Sets, by Sex, Skill, and Type of Company, August 1937

Sex and skill	All plants	Group A plants	Group B plants	Plants in New York City ¹
All employees.....	\$0.609	\$0.731	\$0.531	\$0.477
Skilled.....	.752	.890	.666	.589
Semiskilled.....	.581	.696	.502	.465
Unskilled.....	.531	.656	.469	.392
Males.....	.696	.800	.610	.509
Skilled.....	.784	.902	.700	.597
Semiskilled.....	.677	.782	.577	.489
Unskilled.....	.577	.666	.506	.408
Females.....	.504	.610	.457	.405
Skilled.....	.523	.659	.499	(?)
Semiskilled.....	.510	.607	.458	.417
Unskilled.....	.473	.628	.437	.378

¹ Included as part of group B, as well as being shown separately.

² Not a sufficient number of workers to justify the presentation of data.

Hourly Earnings, Manufacture of Radio Parts

DIFFERENCES AMONG INDIVIDUAL PLANTS

Hourly earnings in the parts branch of the radio industry averaged 47.9 cents an hour in August 1937. The spread between the highest and lowest paid plants was narrower than was the case in the manufacture of sets, but there was no evidence of rates that were common to all plants. Of the 27 establishments covered, 1 plant averaged under 35 cents, 6 between 35 and 40 cents, 6 between 40 and 45 cents, 7 between 45 and 50 cents, 5 between 50 and 55 cents, 1 between 55 and 60 cents, and 1 over 60 cents.

Earnings in this branch were more or less related to size of establishment, but size was certainly not a decisive factor. Each of the three plants having more than 1,000 employees had a plant average of over 45 cents an hour, and each of the four establishments with fewer than 100 employees averaged under 45 cents. On the other hand, of the 7 plants reporting from 500 to 1,000 employees, 1 averaged between 35 and 40 cents, 4 between 45 and 50 cents, and 2 between 50 and 55 cents. Of the 13 establishments having between 100 and 500 employees, 4 averaged 35 and less than 40 cents, four 40 and less than 45, two 45 and less than 50, two 50 and less than 55, and one over 60 cents.

No correlation was found between plant location and hourly earnings. The Atlantic coast region, for example, contained the establishment with the lowest average (34.8 cents) as well as the one with the highest average (60.6 cents). A difference almost as conspicuous is shown for the plants in the Middle Western region, where average earnings ranged from 36.6 to 56.5 cents. In contrast with the sets branch, earnings in the parts division varied markedly even within restricted areas. To illustrate, in New York City the average hourly earnings in the highest paid plant were 17.1 cents above the average reported by the lowest paid establishment. In the same way, a difference of 14.6 cents was found among the average earnings reported by the eight parts plants covered in Chicago.

As regards organizational status of the workers, the plant with the highest average had an agreement with an affiliated trade-union, as had likewise the establishment with the lowest average. Of 10 plants with a written trade-union agreement, one averaged under 35 cents, one 35 and under 40, four 40 and under 45, one 45 and under 50, one 50 and under 55, one 55 and under 60, and one over 60 cents. The averages of the 17 remaining establishments by contrast, covered a narrower range, of from 35 to 55 cents. Five of these plants averaged between 35 and less than 40 cents, two between 40 and 45 cents, six between 45 and 50 cents, and four between 50 and 55 cents.

Semiskilled workers formed 68.6 percent of the total. Of the remaining employees 12.2 percent were skilled and 19.2 percent unskilled. Females constituted a majority (55.7 percent) of the employees engaged in the manufacture of radio parts. Of the total workers, 8.5 percent were skilled males, 28.5 percent semiskilled males, and 7.3 percent unskilled males. In contrast, only 3.7 percent of the total were skilled females, but the proportion of semiskilled females was 40.1 percent and of unskilled females 11.9 percent.

In three establishments, woman workers comprised four-fifths or more of the total force, and in eight plants they constituted over two-thirds. The proportion of female employees in 13 establishments ranged between one-half and two-thirds, and there was only 1 plant where less than two-fifths of the employees were women. In all except 5 of the 27 plants covered, the semiskilled females constituted the largest group.

In 3 establishments, more than 90 percent of all the workers were semiskilled, and in 12 plants over four-fifths of the employees were classed as semiskilled. In only one establishment, on the other hand, less than half of the employees were in the semiskilled group. No unskilled workers were reported in four plants, but there were seven establishments that had over a fourth of unskilled employees, and in one of these they comprised virtually one-half (48.5 percent) of the labor force. The proportion of skilled workers ranged from 3.0 percent to almost a fourth (24.2 percent).

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EARNINGS OF EMPLOYEES, BY SEX AND SKILL

In the parts branch of the industry, as table 5 indicates, earnings were largely concentrated within the range from 27.5 cents to \$1.20. The largest group was found to be earning 37.5 and under 42.5 cents an hour. Two-thirds of the workers were earning from 32.5 to 52.5 cents, and more than one-fifth earned 52.5 and under 77.5 cents. Less than one-tenth (8.3 percent) received under 32.5 cents, and 4.0 percent averaged 77.5 cents or over.

TABLE 5.—Percentage Distribution of Radio Workers Making Parts, by Average Hourly Earnings, Sex, and Skill, August 1937

Average hourly earnings	All		Skilled		Semiskilled		Unskilled	
	Number of employees	Percent	Number of employees	Percent	Number of employees	Percent	Number of employees	Percent
<i>Both sexes</i>								
Under 27.5 cents.....	162	2.1	1	0.1	43	0.8	118	7.8
27.5 and under 32.5 cents.....	487	6.2	18	1.9	298	5.5	171	11.2
32.5 and under 37.5 cents.....	1,204	15.2	21	2.2	864	15.9	319	21.0
37.5 and under 42.5 cents.....	1,554	19.7	65	6.7	1,080	19.8	409	27.0
42.5 and under 47.5 cents.....	1,378	17.4	125	12.9	1,032	19.0	221	14.5
47.5 and under 52.5 cents.....	1,110	14.0	120	12.4	848	15.6	142	9.3
52.5 and under 57.5 cents.....	706	8.9	84	8.7	546	10.1	76	5.0
57.5 and under 62.5 cents.....	429	5.4	74	7.7	315	5.8	40	2.6
62.5 and under 67.5 cents.....	263	3.3	68	7.0	180	3.3	15	1.0
67.5 and under 72.5 cents.....	182	2.3	65	6.7	112	2.1	5	.3
72.5 and under 77.5 cents.....	122	1.5	67	6.9	53	1.0	2	.1
77.5 and under 82.5 cents.....	71	.9	37	3.8	32	.6	2	.1
82.5 and under 87.5 cents.....	57	.7	48	5.0	9	.2		
87.5 and under 92.5 cents.....	57	.7	43	4.5	13	.2	1	.1
92.5 and under 100.0 cents.....	49	.6	45	4.7	4	.1		
100.0 and under 110.0 cents.....	46	.6	44	4.6	2	(1)		
110.0 and under 120.0 cents.....	30	.4	30	3.1				
120.0 cents and over.....	11	.1	11	1.1				
Total.....	7,918	100.0	966	100.0	5,431	100.0	1,521	100.0
<i>Males</i>								
Under 27.5 cents.....	9	.2	1	.1	7	.3	1	.2
27.5 and under 32.5 cents.....	112	3.2	3	.4	50	2.2	59	10.2
32.5 and under 37.5 cents.....	249	7.1	8	1.2	167	7.4	74	12.8
37.5 and under 42.5 cents.....	450	12.8	25	3.7	303	13.4	122	21.1
42.5 and under 47.5 cents.....	570	16.2	41	6.1	390	17.2	139	24.0
47.5 and under 52.5 cents.....	573	16.4	45	6.7	434	19.1	94	16.3
52.5 and under 57.5 cents.....	445	12.7	52	7.7	340	15.0	53	9.2
57.5 and under 62.5 cents.....	296	8.4	60	8.9	217	9.6	19	3.3
62.5 and under 67.5 cents.....	213	6.1	63	9.4	142	6.3	8	1.4
67.5 and under 72.5 cents.....	166	4.7	55	8.2	106	4.7	5	.9
72.5 and under 77.5 cents.....	113	3.2	64	9.6	48	2.1	1	.2
77.5 and under 82.5 cents.....	67	1.9	35	5.2	31	1.4	1	.2
82.5 and under 87.5 cents.....	56	1.6	48	7.2	8	.4		
87.5 and under 92.5 cents.....	56	1.6	42	6.3	13	.6	1	.2
92.5 and under 100.0 cents.....	48	1.4	44	6.6	4	.2		
100.0 and under 110.0 cents.....	46	1.3	44	6.6	2	.1		
110.0 and under 120.0 cents.....	30	.9	30	4.5				
120.0 cents and over.....	11	.3	11	1.6				
Total.....	3,510	100.0	671	100.0	2,262	100.0	577	100.0
<i>Females</i>								
Under 27.5 cents.....	153	3.5			36	1.1	117	12.4
27.5 and under 32.5 cents.....	375	8.5	15	5.1	248	7.8	112	11.9
32.5 and under 37.5 cents.....	955	21.7	13	4.4	697	22.0	245	26.0
37.5 and under 42.5 cents.....	1,104	25.0	40	13.6	777	24.5	287	30.4
42.5 and under 47.5 cents.....	808	18.3	84	28.5	642	20.3	82	8.7
47.5 and under 52.5 cents.....	537	12.2	75	25.4	414	13.1	48	5.1
52.5 and under 57.5 cents.....	261	5.9	32	10.8	206	6.5	23	2.4
57.5 and under 62.5 cents.....	133	3.0	14	4.7	98	3.1	21	2.2
62.5 and under 67.5 cents.....	50	1.1	5	1.7	38	1.2	7	.7
67.5 and under 72.5 cents.....	16	.4	10	3.4	6	.2		
72.5 and under 77.5 cents.....	9	.2	3	1.0	5	.2	1	.1
77.5 cents and over.....	7	.2	4	1.4	2	(1)	1	.1
Total.....	4,408	100.0	295	100.0	3,169	100.0	944	100.0

¹ Less than 1/10 of 1 percent.

Hourly Earnings in Manufacture of Radio Tubes

DIFFERENCES AMONG INDIVIDUAL PLANTS

In the tubes branch of the industry, hourly earnings of all employees in August 1937 averaged 47.9 cents. The range in averages of individual plants was from 35.9 to 57.9 cents, a difference of 22.0 cents. Between these extremes, two establishments averaged under 40 cents, two between 40 and 45, one between 45 and 50, and one over 50 cents. Although this is somewhat less than the absolute spread reported for either the sets or parts divisions, it is particularly significant in view of the fact that the manufacture of tubes is concentrated in the hands of comparatively few companies.

Neither plant location nor size of establishment apparently had much effect upon prevailing wage levels in this branch of the industry.

Of the eight plants covered, five employed over 1,000 and three less than 1,000 employees. Only one of the eight establishments had an agreement with an affiliated trade-union at the time of the survey. This branch of the radio industry had the largest proportion of semi-skilled workers (80.5 percent); the remainder of the tubes workers were divided about equally between skilled (9.1 percent) and unskilled (10.4 percent). Likewise, the tubes division had the largest proportion of females, 82.4 percent being of this sex. Naturally, semiskilled females were by far the most important group in tubes plants (73.9 percent of the total working force). Skilled females formed 1.9 percent, unskilled females 6.6 percent, skilled males 7.2 percent, semiskilled males 6.6 percent, unskilled males 3.8 percent of the total workers.

Although the above proportions differed from one establishment to another, the extent of variation in tubes was not so marked as in the parts and sets branches of the industry. For semiskilled workers, the range was from 73.4 to 88.3 percent. The proportion of unskilled workers varied from 3.8 to 20.2 percent, and the number of skilled employees ranged from 5.0 to 10.9 percent. The proportion of females varied from 73.9 to 87.9 percent. In every one of the plants, the semiskilled females constituted at least two-thirds of the working force. These differing proportions, of course, were partly responsible for the variations in the average hourly earnings among the various plants.

There was also considerable variation in plant averages on the basis of each sex-skill group. For semiskilled females, the largest group, the averages ranged from 35.9 to 51.3 cents, with four establishments paying less than 40 cents and only one over 50 cents. The range in averages for skilled females was from 40.4 to 56.9 cents and for unskilled females from 29.0 to 50.4 cents. Among males, the largest spread was for skilled workers, the plant averages varying all the way

from 54.8 to 93.9 cents. The plant averages of semiskilled males ranged from 38.4 to 74.4 cents, while for unskilled males they ranged from 31.1 to 70.4 cents.

EARNINGS OF EMPLOYEES, BY SEX AND SKILL

The great majority of the employees (82.3 percent) were concentrated within the 25-cent range of 32.5 and under 57.5 cents an hour (table 6). Moreover, the class earning 47.5 to 52.5 cents, accounted for nearly a fourth (24.1 percent) of the workers. There was also another important concentration (16.3 percent) in the class of 32.5 and less than 37.5 cents. Beginning with 57.5 cents, the proportions fell off decidedly, though there were two minor concentrations in the classes of 72.5 and under 77.5 and 92.5 and under \$1.00.

The tubes branch revealed distinctly different wage levels of male and female workers. Skilled males, for example, averaged 76.8 cents an hour, as against 49.5 cents for skilled female employees. Similarly, a difference of 12.0 cents was shown between the average earnings of semiskilled male (56.4 cents) and female (44.4 cents) workers. In the unskilled group, the margin of the male over female workers amounted to 13.9 cents, the respective averages being 51.2 and 37.3 cents. As a result, the separate distributions for the male and female employees revealed marked contrasts.

For male employees, the hourly earnings were spread over a relatively wide range. This was particularly true of the skilled group and to a lesser extent of the semiskilled and unskilled workers. Compared with the wide range of earnings of male workers, those of female employees were sharply restricted. The effective range for semiskilled females was from 27.5 to 57.5 cents an hour; for skilled, 37.5 to 62.5 cents; and for unskilled, 22.5 to 57.5 cents.

TABLE 6.—Percentage Distribution of Radio Workers Making Tubes, by Average Hourly Earnings, Sex, and Skill, August 1937

Average hourly earnings	All		Skilled		Semiskilled		Unskilled	
	Number of employees	Percent	Number of employees	Percent	Number of employees	Percent	Number of employees	Percent
<i>Both sexes</i>								
22.5 and under 27.5 cents.....	27	0.4					27	4.1
27.5 and under 32.5 cents.....	434	6.9			291	5.8	143	21.8
32.5 and under 37.5 cents.....	1,025	16.3	6	1.0	880	17.4	139	21.2
37.5 and under 42.5 cents.....	883	14.1	33	5.8	769	15.2	81	12.4
42.5 and under 47.5 cents.....	865	13.8	32	5.6	768	15.2	65	9.9
47.5 and under 52.5 cents.....	1,511	24.1	61	10.7	1,377	27.4	73	11.1
52.5 and under 57.5 cents.....	880	14.0	54	9.4	788	15.6	38	5.8
57.5 and under 62.5 cents.....	120	1.9	55	9.6	54	1.1	11	1.7
62.5 and under 67.5 cents.....	78	1.2	37	6.5	16	.3	25	3.8
67.5 and under 72.5 cents.....	70	1.1	23	4.0	27	.5	20	3.1
72.5 and under 77.5 cents.....	85	1.4	43	7.5	27	.5	15	2.3
77.5 and under 82.5 cents.....	67	1.1	33	5.8	24	.5	10	1.5
82.5 and under 87.5 cents.....	47	.7	30	5.2	11	.2	6	.9
87.5 and under 92.5 cents.....	42	.7	32	5.6	9	.2	1	.2
92.5 and under 100.0 cents.....	60	1.0	52	9.1	7	.1	1	.2
100.0 and under 110.0 cents.....	51	.8	49	8.6	2	(1)		
110.0 and under 120.0 cents.....	24	.4	24	4.2				
120.0 cents and over.....	8	.1	8	1.4				
Total.....	6,277	100.0	572	100.0	5,050	100.0	655	100.0
<i>Males</i>								
22.5 and under 27.5 cents.....	3	.3					3	1.3
27.5 and under 32.5 cents.....	23	2.1			4	1.0	19	7.9
32.5 and under 37.5 cents.....	76	6.9	5	1.1	31	7.5	40	16.7
37.5 and under 42.5 cents.....	69	6.2	8	1.8	38	9.2	23	9.6
42.5 and under 47.5 cents.....	77	7.0	20	4.4	29	7.0	28	11.7
47.5 and under 52.5 cents.....	151	13.6	26	5.7	95	23.0	30	12.6
52.5 and under 57.5 cents.....	98	8.9	31	6.8	60	14.5	7	2.9
57.5 and under 62.5 cents.....	79	7.1	34	7.5	34	8.2	11	4.6
62.5 and under 67.5 cents.....	78	7.0	37	8.1	16	3.9	25	10.5
67.5 and under 72.5 cents.....	69	6.2	23	5.1	26	6.3	20	8.4
72.5 and under 77.5 cents.....	85	7.7	43	9.5	27	6.5	15	6.3
77.5 and under 82.5 cents.....	67	6.1	33	7.3	24	5.8	10	4.2
82.5 and under 87.5 cents.....	47	4.2	30	6.6	11	2.7	6	2.5
87.5 and under 92.5 cents.....	42	3.8	32	7.0	9	2.2	1	.4
92.5 and under 100.0 cents.....	60	5.4	52	11.3	7	1.7	1	.4
100.0 and under 110.0 cents.....	51	4.6	49	10.7	2	.5		
110.0 and under 120.0 cents.....	24	2.2	24	5.3				
120.0 cents and over.....	8	.7	8	1.8				
Total.....	1,107	100.0	455	100.0	413	100.0	239	100.0
<i>Females</i>								
22.5 and under 27.5 cents.....	24	.5					24	5.8
27.5 and under 32.5 cents.....	411	7.9			287	6.2	124	29.8
32.5 and under 37.5 cents.....	949	18.4	1	.9	849	18.3	99	23.8
37.5 and under 42.5 cents.....	814	15.7	25	21.4	731	15.8	58	13.9
42.5 and under 47.5 cents.....	788	15.2	12	10.3	739	15.9	37	8.9
47.5 and under 52.5 cents.....	1,360	26.4	35	29.8	1,282	27.6	43	10.3
52.5 and under 57.5 cents.....	782	15.1	23	19.7	728	15.7	31	7.5
57.5 cents and over.....	42	.8	21	17.9	21	.5		
Total.....	5,170	100.0	117	100.0	4,637	100.0	416	100.0

¹ Less than 1/10 of 1 percent.² Only one employee averaged more than 62.5 cents.*Hourly Earnings in the Industry as a Whole*

Table 7 shows for all three branches of the industry combined, the distribution of employees according to average hourly earnings, as well as by sex and skill.

TABLE 7.—Distribution of Radio Workers, All 3 Branches of Industry Combined, by Average Hourly Earnings, Sex, and Skill, August 1937

Average hourly earnings	All		Skilled		Semiskilled		Unskilled	
	Number of employees	Simple percentage	Number of employees	Simple percentage	Number of employees	Simple percentage	Number of employees	Simple percentage
<i>Both sexes</i>								
Under 22.5 cents.....	15	0.1	1	(1)	4	(1)	10	0.2
22.5 and under 27.5 cents.....	239	.8			100	0.5	139	3.0
27.5 and under 32.5 cents.....	997	3.5	19	0.4	630	3.2	348	7.5
32.5 and under 37.5 cents.....	3,236	11.3	83	1.9	2,355	12.0	798	17.2
37.5 and under 42.5 cents.....	3,403	11.9	167	3.9	2,518	12.9	718	15.4
42.5 and under 47.5 cents.....	3,865	13.5	247	5.7	2,896	14.9	722	15.5
47.5 and under 52.5 cents.....	4,702	16.6	348	8.0	3,847	19.8	507	10.9
52.5 and under 57.5 cents.....	3,073	10.8	390	9.1	2,308	11.8	375	8.1
57.5 and under 62.5 cents.....	1,954	6.8	301	7.0	1,336	6.8	317	6.8
62.5 and under 67.5 cents.....	1,751	6.1	294	6.8	1,065	5.4	392	8.4
67.5 and under 72.5 cents.....	1,108	3.9	315	7.3	645	3.3	148	3.2
72.5 and under 77.5 cents.....	1,103	3.9	320	7.4	703	3.6	80	1.7
77.5 and under 82.5 cents.....	840	2.9	321	7.4	456	2.3	63	1.4
82.5 and under 87.5 cents.....	666	2.3	412	9.6	239	1.2	15	.3
87.5 and under 92.5 cents.....	524	1.8	370	8.5	146	.7	8	.2
92.5 and under 100.0 cents.....	479	1.7	322	7.4	149	.8	8	.2
100.0 and under 110.0 cents.....	400	1.4	252	5.8	146	.7	2	(1)
110.0 and under 120.0 cents.....	155	.5	127	2.9	28	.1		
120.0 cents and over.....	45	.2	40	.9	5	(1)		
Total.....	28,555	100.0	4,329	100.0	19,576	100.0	4,650	100.0
<i>Males</i>								
Under 27.5 cents.....	38	0.3	1	(1)	29	.5	8	.4
27.5 and under 32.5 cents.....	154	1.3	3	.1	70	1.1	81	3.9
32.5 and under 37.5 cents.....	491	4.1	37	1.0	247	3.9	207	10.1
37.5 and under 42.5 cents.....	694	5.8	77	2.2	400	6.3	217	10.5
42.5 and under 47.5 cents.....	1,100	9.2	94	2.6	713	11.3	293	14.2
47.5 and under 52.5 cents.....	1,337	11.3	157	4.4	942	14.9	238	11.6
52.5 and under 57.5 cents.....	1,164	9.8	267	7.5	669	10.6	228	11.1
57.5 and under 62.5 cents.....	969	8.1	235	6.6	504	8.0	230	11.2
62.5 and under 67.5 cents.....	1,006	8.4	259	7.3	483	7.6	264	12.8
67.5 and under 72.5 cents.....	935	7.8	292	8.2	520	8.2	123	6.0
72.5 and under 77.5 cents.....	984	8.2	301	8.5	607	9.6	76	3.7
77.5 and under 82.5 cents.....	813	6.8	315	8.9	438	6.9	60	2.9
82.5 and under 87.5 cents.....	657	5.5	412	11.5	230	3.6	15	.7
87.5 and under 92.5 cents.....	523	4.4	369	10.4	146	2.3	8	.4
92.5 and under 100.0 cents.....	477	4.0	320	9.0	149	2.4	8	.4
100.0 and under 110.0 cents.....	400	3.3	252	7.1	146	2.3	2	.1
110.0 and under 120.0 cents.....	155	1.3	127	3.6	28	.4		
120.0 cents and over.....	45	.4	40	1.1	5	.1		
Total.....	11,942	100.0	3,558	100.0	6,326	100.0	2,058	100.0
<i>Females</i>								
Under 22.5 cents.....	14	.1			4	(1)	10	.4
22.5 and under 27.5 cents.....	202	1.2			71	.5	131	5.1
27.5 and under 32.5 cents.....	843	5.1	16	2.1	560	4.2	267	10.3
32.5 and under 37.5 cents.....	2,745	16.5	46	6.0	2,108	15.9	591	22.7
37.5 and under 42.5 cents.....	2,709	16.3	90	11.7	2,118	16.0	501	19.2
42.5 and under 47.5 cents.....	2,765	16.6	153	19.7	2,183	16.5	429	16.6
47.5 and under 52.5 cents.....	3,365	20.3	191	24.7	2,905	22.0	269	10.4
52.5 and under 57.5 cents.....	1,909	11.5	123	16.0	1,639	12.4	147	5.7
57.5 and under 62.5 cents.....	985	5.9	66	8.6	832	6.3	87	3.4
62.5 and under 67.5 cents.....	745	4.5	35	4.5	582	4.4	128	4.9
67.5 and under 72.5 cents.....	173	1.0	23	3.0	125	.9	25	1.0
72.5 and under 77.5 cents.....	119	.7	19	2.5	96	.7	4	.2
77.5 and under 82.5 cents.....	27	.2	6	.8	18	.1	3	.1
82.5 and under 87.5 cents.....	9	.1			9	.1		
87.5 and under 92.5 cents.....	1	(1)	1	.1				
92.5 cents and over.....	2	(1)	2	.3				
Total.....	16,613	100.0	771	100.0	13,250	100.0	2,592	100.0

¹ Less than 1/10 of 1 percent.

EARNINGS AND HOURS IN THE EXPLOSIVES INDUSTRY, OCTOBER 1937¹

AVERAGE hourly earnings of all wage earners in the explosives industry amounted to 77.1 cents in October 1937. These employees worked on the average 41.3 hours a week, which resulted in an average of \$31.84 in weekly earnings. The hourly earnings averaged 85.2 cents for skilled, 71.1 cents for semiskilled, and 62.0 cents for unskilled workers. More detailed data are given in the following report, based on a survey of the explosives industry recently completed by the Bureau of Labor Statistics.

Scope of Industry and of Study

The explosives industry, as defined by the Census of Manufactures, includes establishments engaged primarily in the manufacture of dynamite, gelatin dynamite, "permissible" explosives (i. e., those approved by the U. S. Bureau of Mines for use in mines where dust and gas explosions are likely to occur), nitroglycerin, black blasting, pellet, and fuse powder, smokeless powder, and miscellaneous explosives.

Of the products made by the industry, dynamite is by far the most important. In 1935, dynamite accounted for nearly 50 percent of the total value of all products manufactured by the industry.

Although explosives are used widely, the industry is relatively small. In 1935, according to the Census of Manufactures, there were 74 establishments, each of which had an output for the year valued at \$5,000 or more. The present survey was restricted to establishments reporting 5 or more workers, thus including 51 plants in 21 States. At the time of the survey in October 1937, they employed a total of 3,814 wage earners engaged on work falling within the scope of the survey.²

The explosives industry here covered may be divided into two branches—high explosives (including dynamite, nitroglycerin, nitrostarch, dinite, and TNT), and black powder. There are several types of dynamite (gelatin, powder or granulated, and permissible) as well as of black powder (pellet, fuse, blasting, etc.). The raw materials used in the manufacture of high explosives are nitric acid, sulphuric acid, glycerin, toluene, and various "dopes" (nitro-cotton, ammonium nitrate, sodium nitrate, wood pulp, starch, etc.), whereas those used in the manufacture of black powder are charcoal, sulphur, and salt-peter or nitrate of soda. The making of high explosives involves largely chemical processes, whereas that of black powder involves

¹ Prepared by J. Perlman, P. L. Jones, and O. R. Witmer, of the Bureau's Division of Wages, Hours, and Working Conditions.

² At the time of the survey these plants employed a total of 4,524 wage earners.

mechanical processes almost entirely. High explosives are used for heavy blasting in construction, mining, quarrying, stumping, and oil-well shooting; black powder is used in the manufacture of fireworks and ammunition, and for light blasting in coal mining.

A given plant usually specializes in the making of either one or the other kind of products. However, there were three establishments making both high-explosive and black-powder products, and these were classified in accordance with the predominant product. Of the 51 establishments covered, 32 with 3,058 workers were high-explosive plants and 19 with 756 wage earners were black-powder plants.

CHARACTERISTICS OF INDUSTRY

As explosives are difficult to transport and store with safety, production is found for the most part near the centers of demand. Mainly for this reason, establishments manufacturing explosives are widely scattered over the country. In 1935, the Census of Manufactures reported explosives plants in 24 different States. Largely because of the demand from the coal-mining industry, Pennsylvania is the leading State in the manufacture of explosives, having accounted in 1935 for almost a fourth of the workers employed and nearly a fifth of the value of products. The 51 plants covered by the Bureau's study were distributed, by States, as follows: 12 in Pennsylvania, 6 in Illinois, 4 in Washington, 3 each in California, Missouri, and Ohio, 2 each in Alabama, Arizona, Michigan, New Jersey, and Tennessee, and 1 each in Arkansas, Colorado, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Utah, West Virginia, and Wisconsin.

Both branches of the industry are extremely hazardous, especially in the initial processes during which the various sensitive explosive ingredients are mixed together. The subsequent operations in each branch are less hazardous. Because of the nature of the materials used, the degree of risk is considerably greater in making high explosive than in making black powder. As a result of the danger the industry has learned to take extraordinary safety precautions. The various operations are performed in widely separated buildings, in order to confine as much as possible the effects of an accidental explosion. Insofar as practicable, the equipment is made from wood and rubber. The carrying of matches, and the wearing of shoes with nails are universally prohibited. Some of the operations are performed by remote control. The employees are subjected to strict training in safety habits. Lastly, the plants are nearly always located in isolated areas and the grounds are well fenced and policed. Many of these and other precautions are required by municipal and State legislation and regulations.

Establishments making explosives are generally not very large. Of the 51 plants included, 1 had 5 wage earners, 5 from 6 to 20, 17 from 21 to 50, 15 from 51 to 100, 11 from 101 to 250, and 2 from 251 to 500 workers.

Although the individual establishments in the explosives industry are relatively small, there is substantial integration from the standpoint of ownership. The 51 plants included in the survey were controlled by 19 companies. One company owned 12 establishments, another 9, a third 7, a fourth 3, and each of 5 others 2; the remaining 10 owned 1 plant each. The three largest companies controlled 28 establishments and employed 2,781 wage earners, whereas the other 16 companies controlled 23 establishments and employed 1,033 workers. The "Big Three" predominated more in the high-explosives branch of the industry; they controlled 18 plants with 2,394 wage earners, the "Other companies" had 14 establishments with 664 workers. In the black-powder branch, on the other hand, the "Big Three" had 10 establishments with 387 workers and the "Other companies" had 9 plants with 369 wage earners.

Partly because of storage hazards and partly because of the seasonal character of the demand for explosives, output and employment in the industry are subject to some seasonal fluctuation. Employment in high explosives is usually at a low point during the winter and mid-summer, and the busiest season is generally in the fall and spring months. The black powder manufacturers are busiest during the late fall and winter months. The information obtained in this survey covered, in nearly all plants, a pay-roll period in October 1937.

COMPARATIVE WAGE LEVEL IN THE INDUSTRY

The trend of average hourly earnings in the explosives industry has been upward since 1933. The extent of the rise, according to the employment and pay-roll data compiled by the Bureau of Labor Statistics, may be seen from the fact that the yearly average increased from 57.7 cents in 1933 to 78.3 cents in 1937. (See table 1.) In October 1937, when this survey was made, the average for regularly reporting establishments in the industry as a whole was 79.5 cents an hour, which may be compared with the average of 77.1 cents obtained in this survey.

Average weekly hours have also been tending upward during recent years. In 1932, when the depression was at its worst, working time in the explosives industry averaged 34.3 hours a week. In 1937, however, weekly hours averaged 39.6, an increase of 15.5 percent.

Weekly earnings in the explosives industry reflect the changes that have taken place in average hourly earnings and average weekly hours.

From an average of only \$20.26 in 1932, weekly earnings advanced to an average of \$31.03 in 1937, an increase of more than 50 percent.

TABLE 1.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings of Explosives Workers, by Year, 1932-37¹

Year	Average hourly earnings	Average weekly hours	Average weekly earnings
1932.....	\$0.586	34.3	\$20.26
1933.....	.577	35.2	20.55
1934.....	.627	34.6	22.12
1935.....	.676	35.9	24.27
1936.....	.706	39.6	27.95
1937.....	.783	39.6	31.03

¹ Prepared by the Bureau's Division of Employment Statistics.

The explosives industry ranks among the manufacturing industries with the highest average hourly earnings. In October 1937, when the present survey was made, it was tenth among the 89 manufacturing industries for which information concerning average hourly earnings is available, as based on the monthly employment and payroll reports made to the Bureau of Labor Statistics. The relative position of explosives among the 15 highest-paid manufacturing industries at that time is indicated below:

	Average hourly earnings
Newspapers and periodicals.....	\$0.974
Petroleum refining.....	.969
Rubber tires and inner tubes.....	.966
Automobiles.....	.914
Blast furnaces, steel works, and rolling mills.....	.837
Beverages.....	.835
Shipbuilding.....	.830
Engines, turbines, tractors, and water wheels.....	.825
Cash registers, adding machines, and calculating machines.....	.825
Explosives.....	.795
Book and job printing.....	.785
Chemicals.....	.779
Locomotives.....	.774
Cars, electric- and steam-railroad.....	.748
Agricultural implements.....	.745

In the group of industries manufacturing chemicals and allied products (other than petroleum refining), the explosives industry ranked first in average hourly earnings. The average of 79.5 cents for explosives was followed by 77.9 cents for chemicals and 71.9 cents for soap. The average for the whole chemicals group was 65.4 cents per hour.

The favorable position occupied by the industry with respect to average earnings per hour is due considerably to the relatively high proportion of skilled workers employed. Of the 3,814 wage earners

covered by the survey, more than one-half (2,055, or 53.9 percent) were in occupations classified by the industry as skilled, and over one-fourth (1,071, or 28.1 percent) were semiskilled. Workers in the unskilled occupations accounted for less than one-fifth (688, or 18.0 percent) of the total labor force. Another factor responsible for the high average hourly earnings is the small number of female wage earners³ in the industry.

Broadly speaking, there is very little organization among the workers in the explosives industry. Of the 51 establishments with 3,814 employees, only 4 plants with 156 wage earners had collective agreements with trade-unions. In three of these establishments, there were written contracts with locals of the United Powder and High Explosive Workers of America, which is affiliated with the American Federation of Labor. The remaining plant had an oral agreement with a union affiliated with the Committee on Industrial Organization. Company unions were reported in 5 establishments having 306 wage earners.

TYPES OF DATA COLLECTED

The information in this survey was collected by actual visits of field representatives of the Bureau to every establishment included.

Using pay-roll or other records, the field representative obtained for every employee (outside of higher supervisory and office workers) in a given plant the occupation, sex, color, total hours actually worked, and total earnings for one pay-roll period in October 1937.⁴ In addition, there was secured certain general information for the establishment as a whole concerning full-time hours, overtime rates, methods of wage payment, and employer-employee relations.

Descriptions of the various occupations found were made by the field representatives in a limited number of plants. These descriptions, which were secured from foremen or other persons in charge of operations, were used as a basis in determining the occupational groups as shown in table 4. Moreover, the persons in charge of operations in each establishment were asked to designate every occupation as to skill. Using the consensus from the various plants visited, the occupations were then classified according to skilled, semiskilled, or unskilled.

³ No separate tabulations by sex or race were warranted. Only 19 women were found, all in the paper-shell rolling department, where they worked as hand or machine shell rollers and pickers. Also, only 13 Negroes were reported, all of whom were employed by a few plants in the Southern States. There were also 67 Mexicans in several establishments.

⁴ In case the pay-roll period exceeded 1 week, there were also obtained the total hours actually worked for one continuous week in the pay-roll period. This made it possible to compile data on weekly hours and weekly earnings for all establishments.

Average Hourly Earnings

METHODS OF WAGE PAYMENT

Nearly all (98.5 percent) of the wage earners employed in the manufacture of explosives are paid on a straight time-rate basis. This practice was followed exclusively by 43 of the 51 establishments covered in the survey. In the remaining 8 plants, some employees were paid on a straight piece-rate basis, and in one of these some received a group bonus, which was based on production in excess of a specified amount.

Overtime was paid for at the rate of time and one-half to all workers in 30 of the 51 establishments covered (i. e., in 25 plants belonging to the "Big Three" and in 5 belonging to the "Other companies"). This overtime rate was provided for in 3 out of the 4 plants that had a written agreement with a trade-union. In the remaining 21 establishments (3 plants belonging to the "Big Three" and 18 to the "Other companies"), overtime was compensated for at the regular rate, to all wage earners. Following the practice found in most industries, these overtime provisions did not apply to any of the salaried employees, who are usually expected to do necessary overtime work without additional compensation.

DATA FOR INDUSTRY AS A WHOLE

For the explosives industry as a whole, hourly earnings in October 1937 averaged 77.1 cents. No average, however, gives an accurate idea of the sharp differences that prevail. For this reason, a better perspective of earnings in the industry is afforded by the wage distribution in table 2.

TABLE 2.—*Distribution of Explosives Workers, by Average Hourly Earnings, in October 1937*

Average hourly earnings	Number of employees	Simple percentage	Cumulative percentage	Average hourly earnings	Number of employees	Simple percentage	Cumulative percentage
Under 37.5 cents.....	30	0.8	0.8	82.5 and under 87.5 cents.....	463	12.1	74.0
37.5 and under 42.5 cents.....	34	.9	1.7	87.5 and under 92.5 cents.....	266	7.0	81.0
42.5 and under 47.5 cents.....	48	1.2	2.9	92.5 and under 97.5 cents.....	237	6.2	87.2
47.5 and under 52.5 cents.....	101	2.7	5.6	97.5 and under 102.5 cents.....	169	4.4	91.6
52.5 and under 57.5 cents.....	223	5.8	11.4	102.5 and under 107.5 cents.....	109	2.9	94.5
57.5 and under 62.5 cents.....	336	8.8	20.2	107.5 and under 112.5 cents.....	114	3.0	97.5
62.5 and under 67.5 cents.....	426	11.2	31.4	112.5 and under 125.0 cents.....	71	1.8	99.3
67.5 and under 72.5 cents.....	413	10.8	42.2	125.0 cents and over.....	25	.7	100.0
72.5 and under 77.5 cents.....	378	9.9	52.1				
77.5 and under 82.5 cents.....	371	9.8	61.9	Total.....	3,814	100.0	-----

An outstanding characteristic of the industry is the dispersion of earnings. There is no pronounced single point of concentration. The group of 82.5 and under 87.5 cents accounts for a larger proportion of

the total working force than any other, but another concentration is in the class interval of 62.5 and less than 67.5 cents.

Nearly half (47.9 percent) of the total labor force was paid 77.5 cents an hour or more (slightly more than the average for the industry as a whole). Of the total employees, the earnings of 35.1 percent ranged between 77.5 and 97.5 cents, and 12.8 percent averaged as much as 97.5 cents an hour or more.

It is significant also that of the 1,989 workers who earned less than 77.5 cents an hour, the earnings of the great majority tended toward that limit. Virtually two-thirds of these employees, for example, earned between 62.5 and 77.5 cents an hour, and more than one-fourth earned between 52.5 and 62.5 cents. Those earning under 52.5 cents accounted for less than one-tenth of the lower-paid workers, or only 5.6 percent of the total working force.

DIFFERENCES BY SKILL

The average hourly earnings of skilled employees, of course, are the highest, amounting to 85.2 cents an hour. Semiskilled workers averaged 71.1 and unskilled, 62.0 cents. The range between the average earnings of the skilled and the semiskilled workers is thus 14.1 cents and between the semiskilled and the unskilled 9.1 cents—altogether, a spread of 23.2 cents.

The analysis of average hourly earnings is further amplified in table 3, which shows the distributions of skilled, semiskilled, and unskilled workers. Not only do earnings vary among the broad occupational groups, but there are likewise noteworthy differences within each group.

TABLE 3.—*Percentage Distribution of Explosives Workers, by Average Hourly Earnings and Skill, October 1937*

Average hourly earnings (in cents)	Skilled	Semi- skilled	Un- skilled	Average hourly earnings (in cents)	Skilled	Semi- skilled	Un- skilled
Under 37.5.....	0.4	0.7	2.2	92.5 and under 97.5.....	10.2	2.3	0.5
37.5 and under 42.5.....	.3	1.4	1.9	97.5 and under 102.5.....	7.5	1.1	.3
42.5 and under 47.5.....	.5	1.0	3.9	102.5 and under 107.5.....	5.2	.2	
47.5 and under 52.5.....	.5	2.5	9.3	107.5 and under 112.5.....	5.3	.4	.1
52.5 and under 57.5.....	2.3	5.4	17.0	112.5 and under 125.0.....	3.5		
57.5 and under 62.5.....	4.1	10.3	20.6	125.0 and over.....	1.2		
62.5 and under 67.5.....	7.5	16.3	14.1				
67.5 and under 72.5.....	7.5	14.2	15.6	Total.....	100.0	100.0	100.0
72.5 and under 77.5.....	7.8	15.6	7.1				
77.5 and under 82.5.....	10.7	11.5	4.4	Average earnings, all em- ployees (in cents).....	85.2	71.1	62.0
82.5 and under 87.5.....	14.8	13.5	2.0				
87.5 and under 92.5.....	10.7	3.6	1.0				

A large proportion of the skilled employees (46.4 percent) was concentrated within the 20-cent range of 77.5 to 97.5 cents. Nearly a fourth (22.7 percent) of the skilled workers, however, received above

97.5 cents an hour, as compared with three-tenths (30.9 percent) earning less than 77.5 cents. Although there was no very pronounced concentration of the skilled workers, the largest proportion was found in the class of 82.5 to 87.5 cents.

For the semiskilled group, the workers were found mainly within a 30-cent range, 81.4 percent being paid from 57.5 to 87.5 cents an hour. There were, however, 7.6 percent who earned more than 87.5 cents, and 11.0 percent received less than 57.5 cents. More of the semiskilled workers were found in the class of 62.5 and under 67.5 cents than in any other single group, although concentrations also appear in the classes of 72.5 to 77.5 and 82.5 to 87.5 cents.

In contrast with the skilled and semiskilled employees, there was a fairly well-defined modal concentration of the unskilled workers in the class interval of 57.5 to 62.5 cents. This class alone accounted for more than a fifth (20.6 percent) of the unskilled employees. There was also a secondary mode in the interval of 67.5 to 72.5 cents. It should be noted, however, that more than two-thirds of the unskilled workers are found within the 20-cent range of 52.5 to 72.5 cents. The earnings of 17.3 percent of the unskilled workers were below 52.5 cents, and the earnings of 15.4 percent averaged more than 72.5 cents an hour.

Considering the three distributions side by side, the number paid under 62.5 cents, which is slightly above the unskilled average, was 54.9 percent for the unskilled, 21.3 percent for the semiskilled, and only 8.1 percent for the skilled. If 72.5 cents, or somewhat more than the semiskilled average, is taken as the upper limit, the percentages are 84.6 for the unskilled, 51.8 for the semiskilled, and 23.1 for the skilled. On the other hand, the percentage receiving 87.5 cents (somewhat above the skilled average) or more, amounted to 43.6 of the skilled employees, as compared with 7.6 of the semiskilled and only 1.9 of the unskilled.

DIFFERENCES BY OCCUPATIONAL CLASSES

There are a considerable number of occupations in the explosives industry. Because of the small number of employees involved in the total industry, however, most of the occupations were too small to justify the computation of separate averages. Hence it was necessary to group the individual occupations into related occupational classes, for which averages are presented in table 4. For example, acid operators include the following occupations: General acid operators, acid makers, acid concentrators, acid mixers, acid-recovery operators, ammonium-nitrate operators, and sodium-nitrite operators.

TABLE 4.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings of Explosives Workers, by Skill and Occupational Class, October 1937

Skill and occupational class	Number of employees	Average hourly earnings	Average weekly hours	Average weekly earnings
All employees.....	3,814	\$0.771	41.3	\$31.84
Skilled employees.....	2,055	.852	41.5	35.36
Acid operators.....	197	.828	42.8	35.46
Black-powder line operators.....	87	.684	43.0	29.29
Black-powder maker operators.....	263	.764	41.2	31.53
Dope-house operators.....	107	.766	41.0	31.44
Dynamite loaders.....	241	.880	41.0	36.07
Dynamite mixers.....	90	.813	42.0	34.11
Foremen, working.....	145	1.013	42.6	43.12
Mechanics, maintenance.....	412	.928	40.9	37.96
Nitroglycerin operators.....	89	.918	42.1	38.65
Packers, high explosives and black powder.....	128	.745	40.1	29.89
Miscellaneous skilled, direct.....	131	.824	41.1	33.84
Miscellaneous skilled, indirect.....	165	.879	42.1	36.99
Semiskilled employees.....	1,071	.711	41.6	29.57
Black-powder helpers.....	88	.727	40.0	29.12
High explosive helpers.....	407	.716	40.5	29.02
Miscellaneous semiskilled, direct.....	214	.673	41.8	28.09
Miscellaneous semiskilled, indirect.....	362	.723	43.1	31.17
Unskilled employees.....	688	.620	40.1	24.87

Among the skilled workers, the highest paid occupation was that of foremen, which averaged \$1.013 an hour. Maintenance mechanics, numerically the most important occupational class in the skilled group, was the next highest paid, with an average of 92.8 cents. Relatively high average earnings were also shown for the high explosive occupations of nitroglycerin operators (91.8 cents) and dynamite loaders (88.0 cents). The averages of the remaining occupational classes in high explosive manufacture were 82.8 cents for acid operators, 81.3 cents for dynamite mixers, and 76.6 cents for dope-house operators. The averages of the two skilled occupations peculiar to black-powder manufacture were 76.4 cents for black-powder maker operators and 68.4 cents for black-powder line operators, both of the averages being lower than the lowest-paid skilled occupation peculiar to the high explosive branch (76.6 cents, for dope-house operators). The packers, found both in high explosive and in black-powder plants, averaged 74.5 cents.

As regards the semiskilled workers, however, it will be seen that the high explosive helpers averaged somewhat less than the helpers in black-powder plants.

INFLUENCE OF COMPANY WAGE POLICIES ON EARNINGS

When the analysis was first undertaken, an attempt was made to determine whether there was any distinctive difference in earnings between black powder and high explosives that would warrant treating them as separate industries. The data were also studied for possible evidence of persistent regional differences. In both cases, it was found that company wage policy overshadowed all other differences.

As regards the industrial grouping of plants, there was a difference in the average hourly earnings of all workers in black powder (72.1 cents) and high explosives (78.4 cents). However, the figures for the "Other companies" show higher earnings in black powder (67.0 cents) than in high explosives (64.3 cents). Among the "Big Three", this relationship is reversed, the respective averages being 77.4 and 82.7 cents. As indicated, the "Big Three" predominate more in the high explosives than in the black-powder branch, thus accounting for the higher average in the former as compared with the latter for all establishments. In other words, the industry-wide averages appear to reflect corporate wage policy rather than differences in the two branches.

The Bureau's survey indicates that there are no well-defined geographical differences in earnings in the explosives industry. It is true that the plant with the lowest average hourly earnings was in the South, and the plant with the highest average was in the North. There were, however, 3 southern plants with average earnings of more than 70 cents, while earnings in 11 of the northern and 2 of the far western plants averaged less than 70 cents. Moreover, of the four plants where hourly earnings averaged less than 60 cents, three were located in the North and only one in the South. None of the far western plants paid an average of less than 60 cents an hour, but in four establishments earnings were below the national average for the industry.

More significant still is the fact that even within a single State earnings varied sharply. In Pennsylvania, the most important producing State, hourly earnings ranged from an average of less than 60 to more than 90 cents, a difference of 34.3 cents. In the same way, a difference of 29.5 cents an hour was shown between the earnings of the highest- and lowest-paid establishments in Illinois. Likewise, earnings in the four Washington plants showed a spread of 28.5 cents, the lowest plant being about as much below the national average as the highest plant was above it.

There were striking variations in the average hourly earnings between employees of the "Big Three" producers and those of "Other companies" in the explosives industry. On the average, the earnings of workers employed by the three leading companies in October 1937 were 25.4 percent higher than those of workers employed by the smaller companies. Against an average of 81.9 cents for employees of the "Big Three," the hourly earnings in the establishments of the "Other companies" averaged 65.3 cents.

The difference in favor of the employees of the leading producers was most pronounced for the skilled workers, whose average earnings (91.0 cents) were 27.8 percent higher than the average (71.2 cents) in the smaller companies. The proportion of skilled workers was about the same in both groups of companies, the establishments of

the "Other companies" employing 54.7 percent of their force in skilled jobs and the "Big Three" 53.6 percent.⁵

The relative difference in the earnings of the semiskilled (25.5 percent) was almost the same as for all employees. It was not quite so great as the difference for skilled workers, and the absolute spread (from 75.9 to 60.5 cents) was less than for skilled wage earners. There was a fairly considerable difference in the number of workers in semiskilled occupations between the two groups of companies. Of each 1,000 wage earners in the "Big Three," there were 274 semiskilled workers; in the "Other companies" they numbered 300.

Finally, in the case of the unskilled the wage difference was least marked. The "Big Three" paid 23.1 percent more than the "Other companies" (64.9 as against 52.7 cents an hour). But of each 1,000 workers in the larger companies, 190 were in unskilled occupations as compared with 153 in the smaller companies.

Examination of table 5, which compares the percentage distribution of employees in the "Big Three" with that in "Other companies," makes clear the basis of the peculiarly flat-topped distribution for the industry as a whole. That distribution combines the curve for 1,033 employees in the "Other companies," with a concentration between 62.5 to 67.5 cents and with three-fifths of the workers paid 52.5 and less than 72.5 cents, and the curve for 2,781 wage earners in the "Big Three," whose modal concentration is between 82.5 and 87.5 cents and less than one-third of whom receive under 72.5 cents an hour. The resulting composite for the industry as a whole does not describe conditions in either group of plants, but it shows as minor modes the points of concentration of both groups of companies.

It is also significant to note that for practical purposes the "Big Three" plants had an effective minimum of 37.5 cents an hour, less than one-tenth of 1 percent of their employees receiving under this amount. At the plants of the "Other companies," by contrast, 2.8 percent of the employees earned less than 37.5 cents. In the "Big Three" plants, in fact, very few of the workers (2.4 percent) received less than 52.5 cents, as against 14.0 percent of the employees of the "Other companies." Finally, nearly a fourth (24.3 percent) of the employees of the three leading producers received 92.5 cents or more an hour, but this class accounted for only 4.6 percent of the employees of the "Other companies."

The distributions on the basis of skill for the large and small companies are shown in table 5.⁶ Among the small companies, each of the

⁵ The difference is more marked if a comparison is made excluding foremen. The 23 plants of the "Other companies" employed 25 foremen; there were 120 foremen in the 28 plants of the "Big Three." In other words, the workers in some of the plants of the "Other companies" were supervised directly by the plant manager or superintendent. Of the total number of wage earners, 52.3 percent in the plants of the "Other companies" were skilled workers other than foremen; in the "Big Three" plants, 49.3 percent.

⁶ The total number of skilled workers was 1,490 in the "Big Three" and 565 in the "Other companies"; the respective figures for semiskilled were 761 and 310, and for unskilled 530 and 158.

distributions had essentially a single mode. Each of the distributions of the "Big Three" had several modes, reflecting further marked differences in the wage policies of these companies, which were alike only in the fact that their wages were markedly higher than those of the small companies. In general, it may be said that the earnings of the semiskilled workers in the small companies were slightly lower than the earnings of the unskilled in the large companies, and that the earnings of the skilled in the small companies were slightly lower than the earnings of the semiskilled in the large ones. The small companies stood alone in having any considerable number of unskilled workers employed at less than 52.5 cents an hour; the large companies, in having a substantial proportion of skilled workers above 97.5 cents.

TABLE 5.—*Percentage Distribution of Explosives Workers, by Average Hourly Earnings, Type of Plant, and Skill, October 1937*

Average hourly earnings	"Big Three"				"Other companies"			
	All employees	Skilled	Semi-skilled	Unskilled	All employees	Skilled	Semi-skilled	Unskilled
Under 37.5 cents.....	(¹)			0.2	2.8	1.4	2.3	8.9
37.5 and under 42.5 cents.....	0.4	0.3	0.1	.9	2.2	.2	4.5	5.0
42.5 and under 47.5 cents.....	.5	.2	1.0	.6	3.4	1.2	1.3	15.2
47.5 and under 52.5 cents.....	1.5	.2	.7	6.6	5.6	1.4	6.7	18.4
52.5 and under 57.5 cents.....	3.8	.2	1.1	17.5	11.5	7.8	16.2	15.2
57.5 and under 62.5 cents.....	6.6	1.4	5.9	21.9	14.9	11.2	20.9	16.4
62.5 and under 67.5 cents.....	8.7	3.7	14.5	15.1	17.6	17.7	21.0	10.8
67.5 and under 72.5 cents.....	9.2	3.8	13.8	17.6	15.3	17.2	15.2	8.8
72.5 and under 77.5 cents.....	10.3	6.0	19.4	9.0	8.9	12.7	6.1	.7
77.5 and under 82.5 cents.....	11.4	11.4	15.5	5.5	5.2	8.5	1.6	.6
82.5 and under 87.5 cents.....	14.8	17.8	17.5	2.6	5.0	6.9	3.9	
87.5 and under 92.5 cents.....	8.5	12.9	4.8	1.4	3.0	5.3	.3	
92.5 and under 97.5 cents.....	7.9	12.8	3.3	.5	1.6	3.0		
97.5 and under 102.5 cents.....	5.5	9.4	1.6	.4	1.5	2.7		
102.5 and under 107.5 cents.....	3.5	6.5	.3		1.0	1.9		
107.5 and under 112.5 cents.....	4.1	7.2	.5	.2	.2	.4		
112.5 and under 125.0 cents.....	2.5	4.7			.1	.1		
125.0 cents and over.....	.8	1.5			.2	.4		
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average earnings, all employees (in cents).....	81.9	91.0	75.9	64.9	65.3	71.2	60.5	52.7

¹ Less than 1/10 of 1 percent.

Although in general the average hourly earnings were conspicuously higher in the "Big Three" establishments, marked variations are shown among the plant averages of the three leading producers. This reflects in part the differences among them in wage policy and in part the differences between plants of the same company. (See table 6.) In two of the "Big Three" plants, earnings averaged between 60 and 70 cents an hour, and in 13 more earnings ranged from 70 to 80 cents. In the remaining 13 of the "Big Three" plants, earnings averaged 80 cents or more an hour. However, none of the plants of the three leading producing companies reported an average of less than 60 cents.

In contrast, four of the plants of the "Other companies" had average hourly earnings of less than 60 cents an hour. Compared with only two plants of the "Big Three," as many as 12 of the establishments of the "Other companies" had an average of between 60 and 70 cents which means that earnings in more than two-thirds of the "other" establishments averaged less than 70 cents an hour. On the other hand, not a single plant of the "Other companies" reported an average of more than 80 cents, compared with nearly half of the plants of the "Big Three."

TABLE 6.—*Distribution of Explosives Plants, by Average Hourly Earnings, and Type of Plant, October 1937*

Average hourly earnings	All plants	"Big Three" plants	"Other companies" plants
Under 60 cents.....	4		4
60 and under 65 cents.....	8	1	7
65 and under 70 cents.....	6	1	5
70 and under 75 cents.....	13	8	5
75 and under 80 cents.....	7	5	2
80 and under 85 cents.....	5	5	
85 and under 90 cents.....	2	2	
90 cents and over.....	6	6	
Total.....	51	28	23

Weekly Hours

FULL-TIME WEEKLY HOURS

The full-time weekly hours in the explosives industry in October 1937 were remarkably uniform, a 40-hour week being in effect in all except nine of the plants covered by the survey. Only two of the plants had a workweek of less than 40 hours; of these, one operated on a 35-hour schedule, and the other worked 37½ hours. Among the establishments that worked more than 40 hours a week, two operated 44 hours and five operated 48 hours.

Both of the plants that reported a full-time week of less than 40 hours were "Big Three" establishments. The "Other companies," by contrast, accounted for all of the plants that had a working schedule of more than 40 hours a week. Of the 44 establishments that had a 40-hour week, however, 16 were plants of the "Other companies."

ACTUAL WEEKLY HOURS

As stated previously, the actual working time of all employees in the explosives industry averaged 41.3 hours a week in October 1937.

According to table 7, the actual working time of 58.3 percent of all employees in the industry was exactly 40 hours a week. More than a fourth (28.5 percent) worked over 40 hours and more than an eighth (13.2 percent) had a workweek of less than 40 hours.

Although the working time of 28.3 percent of the employees exceeded 40 hours, relatively few (7.6 percent) worked more than 48 hours a week. At the same time, comparatively few employees (3.1 percent) worked less than 32 hours a week.

The average weekly hours amounted to 40.2 for the "Big Three" plants and 44.1 for plants belonging to the "Other companies."

TABLE 7.—*Distribution of Explosives Workers, by Weekly Hours, in October 1937*

Weekly hours	Number of employees	Simple percentage	Cumulative percentage
Under 16 hours.....	22	0.6	0.6
16 and under 24 hours.....	20	.5	1.1
24 and under 32 hours.....	77	2.0	3.1
32 and under 36 hours.....	278	7.3	10.4
36 and under 40 hours.....	105	2.8	13.2
40 hours.....	2,224	58.3	71.5
Over 40 and under 44 hours.....	262	6.8	78.3
44 and under 48 hours.....	230	6.1	84.4
48 hours.....	308	8.0	92.4
Over 48 and under 56 hours.....	125	3.3	95.7
56 hours and over.....	163	4.3	100.0
Total.....	3,814	100.0	-----

Weekly Earnings

ALL WORKERS

For all employees in the explosives industry, weekly earnings in October 1937, averaged \$31.84.

As shown in table 8, nearly a third of the workers (31.3 percent) were paid \$35 or over a week, and 16.0 percent earned \$40 or more. Only 6.1 percent received less than \$20 weekly. The classification \$30 and under \$35 accounts for a larger proportion of the total working force than any other.

The average weekly earnings amounted to \$32.97 for employees of the "Big Three" companies, as compared with \$28.79 for employees in the "Other companies," or a difference of \$4.18.

TABLE 8.—*Distribution of Explosives Workers, by Weekly Earnings, in October 1937*

Weekly earnings	Number of employees	Simple percentage	Cumulative percentage	Weekly earnings	Number of employees	Simple percentage	Cumulative percentage
Under \$5.....	12	0.3	0.3	\$45 and under \$50.....	144	3.7	97.3
\$5 and under \$10.....	37	1.0	1.3	\$50 and under \$55.....	61	1.6	98.9
\$10 and under \$15.....	28	.7	2.0	\$55 and under \$60.....	21	.6	99.5
\$15 and under \$20.....	155	4.1	6.1	\$60 and under \$65.....	11	.3	99.8
\$20 and under \$25.....	534	14.0	20.1	\$65 and under \$70.....	6	.1	99.9
\$25 and under \$30.....	849	22.2	42.3	\$70 and under \$75.....	3	.1	100.0
\$30 and under \$35.....	1,007	26.4	68.7	Total.....	3,814	100.0	-----
\$35 and under \$40.....	580	15.3	84.0				
\$40 and under \$45.....	366	9.6	93.6				

DIFFERENCES BY SKILL AND OCCUPATION

Average weekly earnings, however, varied sharply between skills, ranging from \$35.36 for skilled employees to \$24.87 for unskilled employees. Semiskilled workers averaged \$29.57 a week.

Among the skilled employees, almost half (48.7 percent) earned \$35 or over a week, and more than a fourth (26.1 percent) received \$40 or over a week. The weekly earnings of 8.4 percent of the skilled employees were less than \$25 a week, but only 2.7 percent earned under \$20. (See table 9.)

Of the skilled employees, foremen (with an average of \$43.12) had the highest average weekly earnings. Other skilled employees whose average weekly earnings were above the average for the group were acid operators, nitroglycerin operators, dynamite loaders, miscellaneous skilled direct workers, and maintenance mechanics. Nitroglycerin operators, with an average of \$38.65, had the highest weekly earnings of the nonsupervisory employees. Black-powder line operators had the lowest average weekly earnings (\$29.39) of any of the skilled workers. (See table 4.)

All except 14.4 percent of the semiskilled employees earned less than \$35 a week, but only 6.0 percent were paid less than \$20. The earnings of nearly four-fifths of the semiskilled workers ranged between \$20 and \$35 a week. (See table 9.)

For the semiskilled employees, the highest weekly earnings were those of the miscellaneous indirect workers, who averaged \$31.17. High explosive helpers, numerically one of the most important occupations in the industry, averaged \$29.02 a week. This was slightly below the earnings of black-powder helpers, who averaged \$29.12 a week. The lowest average for the group was that of the miscellaneous semiskilled direct workers (\$28.09). (See table 4.)

None of the unskilled employees earned \$50 or more a week (compared with 4.5 percent of the skilled and 0.9 percent of the semiskilled workers), and the earnings of only 5.5 percent of the unskilled workers exceeded \$35 or more. For the unskilled group, there was a pronounced concentration in the class interval of between \$20 and \$25. The earnings of 5.5 percent of the unskilled employees were less than \$15 a week. (See table 9.)

TABLE 9.—Percentage Distribution of Explosives Workers, by Weekly Earnings and by Skill, October 1937

Weekly earnings	Skilled	Semi-skilled	Un-skilled	Weekly earnings	Skilled	Semi-skilled	Un-skilled
Under \$5.....		0.2	1.5	\$50 and under \$55.....	2.8	0.3	
\$5 and under \$10.....	0.6	1.0	2.0	\$55 and under \$60.....	.8	.5	
\$10 and under \$15.....	.5	.4	2.0	\$60 and under \$65.....	.5	.1	
\$15 and under \$20.....	1.6	4.4	10.9	\$65 and under \$70.....	.3		
\$20 and under \$25.....	5.7	15.8	35.8	\$70 and under \$75.....	.1		
\$25 and under \$30.....	15.5	29.4	31.5	Total.....	100.0	100.0	100.0
\$30 and under \$35.....	27.4	34.4	10.8				
\$35 and under \$40.....	22.6	9.2	2.7	Average earnings, all			
\$40 and under \$45.....	15.5	2.9	2.4	employees.....	\$35.36	\$29.57	\$24.87
\$45 and under \$50.....	6.1	1.4	.4				

ANNUAL EARNINGS IN MILLINERY MANUFACTURE
IN GREATER NEW YORK

MILLINERY workers engaged by 193 firms earned an average of \$1,106 in 1936, according to an estimate made by the Millinery Stabilization Commission, Inc.,¹ in connection with a study of the economic condition of the millinery manufacturing industry in the New York Metropolitan Area. Employees of the firms having the highest rates of profit received an average of \$771 during that year, and in the firms reporting the lowest margin of profit the annual earnings amounted to \$670. The report here reviewed is the work of the special commission mentioned. An impartial board of three members was set up early in 1936 under a joint agreement of the millinery workers' union and the manufacturers' association. This commission has jurisdiction over the millinery industry of the New York Metropolitan Area embracing the New York City and New Jersey markets. Two-thirds of the millinery manufactured in the United States originates in this area. About 675 firms are registered with the commission. The data reviewed below represent returns covering firms that supplied substantially complete information. The commission believes that the reporting firms are, on the average, more efficient and more successful than nonreporting firms in the industry generally.

Statistics compiled for 199 firms show that they were managed in both 1935 and 1936 by nearly 400 firm members and employed nearly 5,000 workers. The average labor force of 193 firms was 26 workers each in 1936. This average is believed high, for the greater part of the firms in the market; a frequency distribution covering 265 firms shows that the typical plant employed 15 to 25 workers in 1936 and the majority of the plants had 5 to 40 employees. For this larger group the median number was 19 workers; half the firms employed 12 to 30 workers; 25 percent from 3 to 12 workers; and another 25 percent from 30 to 115 workers.

The total costs allocated to labor in 1936 increased 4.2 percent over the preceding year. However, in firms making the lowest-priced hats, that is \$7.50 and under per dozen, there was a decrease of 1 percent in labor cost. The largest increase in labor cost, 7.8 percent, was reported for firms manufacturing millinery selling at \$7.51 to \$13.50 per dozen. The employees engaged in producing hats of this price represented more than two-fifths of the total in the firms covered by the survey.

Employment tended to remain fairly stable for all workers taken together, having increased about one-half of 1 percent in 1936 as com-

¹ Brissenden, Paul F., and Lipshie, Joseph. *The Economic Condition of the Millinery Manufacturing Industry in the New York Metropolitan Area, 1935-36*. New York, Millinery Stabilization Commission, Inc. (1450 Broadway), 1937. Mimeographed.

pared with 1935. Among the various price groups, workers manufacturing the lowest-priced hats lost most heavily in employment.

The commission concluded from its survey that in about half of the firms average yearly earnings in 1936 ranged from \$728 to about \$1,273; in another quarter the average was from \$1,273 to \$2,129; and in the remaining quarter average annual earnings amounted to \$178 to \$728. The distribution of firms and workers is shown in the table following, according to the estimated average annual earnings of workers in 1936.

Distribution of Firms and Workers in Millinery Manufacture, by Estimated Average Annual Earnings, 1936

Average annual earnings	Number of firms	Average number of workers	Average annual earnings	Number of firms	Average number of workers
Total.....	193	5,041	\$1,100 and under \$1,200.....	16	393.5
\$100 and under \$200.....	1	17	\$1,200 and under \$1,300.....	19	714.5
\$200 and under \$300.....	4	94.5	\$1,300 and under \$1,400.....	10	323.5
\$300 and under \$400.....	5	56.5	\$1,400 and under \$1,500.....	9	408.5
\$400 and under \$500.....	7	103.5	\$1,500 and under \$1,600.....	7	156.5
\$500 and under \$600.....	10	148	\$1,600 and under \$1,700.....	8	230
\$600 and under \$700.....	17	416	\$1,700 and under \$1,800.....	4	180.5
\$700 and under \$800.....	13	240.5	\$1,800 and under \$1,900.....	2	46
\$800 and under \$900.....	11	219.5	\$1,900 and under \$2,000.....	2	64
\$900 and under \$1,000.....	26	585.5	\$2,000 and under \$2,100.....		
\$1,000 and under \$1,100.....	21	632	\$2,100 and under \$2,200.....	1	11

The majority of the workers were employed in firms in which the average yearly earnings are from \$600 to \$1,700. Three intervals \$900 and under \$1,000, \$1,000 and under \$1,100, and \$1,200 and under \$1,300 account for 1,932 of the 5,041 employees covered by the figures.



REGULATION OF HOURS OF LABOR IN FRANCE

IN ORDER to stimulate economic activity a decree¹ was issued by the French Government May 24, 1938, fixing the method of making up lost time in industry and the procedure to be followed in the authorization of supplementary hours under the law of June 21, 1936, establishing the 40-hour week. The decree was drawn up after consultation with the National Economic Council. The purpose of the decree is to simplify the procedure by which industrial and commercial undertakings may make up time lost for reasons other than because of a labor dispute, so that as far as possible unemployed workers may be put to work and industrial equipment may be fully utilized. It is stated that industry had not taken sufficient advantage of the right to work supplementary hours or to rotate the working force so as to secure continuous plant operation.

¹ France. Journal Officiel, May 25, 1938, p. 5009.

The decree provides that hours lost following a collective interruption of work other than a strike or lock-out may be made up during the following 12 months, provided that notification of the interruptions and the method of making up the lost time is given to the labor inspector in advance, or in case of unforeseen interruptions, immediately afterward. Such supplementary hours may be authorized for a branch of industry either for a whole territory or for a region by a decree by the Minister of Labor, after consultation with the employers' and workers' organization concerned. It is provided that the supplementary hours may not be distributed uniformly throughout the year. In general, the regular working hours of an establishment or part of an establishment may not be increased more than 1 hour per day nor 8 hours per week.

Regular employees may not be discharged for lack of work within 1 month after the period during which supplementary hours were worked, and such workers, if discharged after that period, must be given priority if additional workers of the same categories are required during the following 6 months. Failure to observe this provision will result in the withdrawal by the Minister of Labor of the permission to work the supplementary hours for the period of 1 year. In cases of extraordinary and prolonged unemployment in any occupation, the provision governing the making up of lost time may be suspended by the Minister of Labor.



EARNINGS OF PEASANTS ON STATE-OWNED FARMS IN THE SOVIET UNION

ON LARGE-SCALE farms (*kolkhozy*), owned and controlled by the Soviet Government, the work is performed on a cooperative basis by the peasants. These peasants are classified according to occupation, skill, and the comparative importance of the work they are performing; and also by organizational groupings (i. e., whether they belong to an *artel*¹ or brigade, or are shock workers or *stakhanovites*).

They are paid largely in kind; i. e., in farm products—principally in grain, by weight. When the amount of products required by the Soviet Government procurement office as tax in kind has been delivered,² and a portion has been earmarked for the general improvement and development of the collective farm, the remaining portion is divided and awarded to the peasants as their earnings, according to a prescribed schedule. The number of days of work performed, in aggregate and by individual workers, during a certain period of time (usually a season), serves as the basis for the calculation of

¹ Monthly Labor Review, June 1932 (pp. 1345-1350).

² As a later development, farm taxes are now paid largely in money (paper rubles).

earnings—so much grain by weight—per working day, the amount depending upon yield of the farm, which in turn depends upon qualities of soil, climatic conditions, the efficiency of the workers, and to a large extent upon the Soviet farming policies.

In order to provide compensation according to the comparative importance of occupation, skill, and efficiency, the number of days of work performed by higher classes of workers is weighted, and a certain proportionate number of working days is added to the number of days actually worked.

The annual report on the condition of 157,423 collective farms, or about two-thirds of the entire number in the Soviet Union in 1937, showed an increase of earnings in grain per working day during 1936 and 1937.³

The number of kolkhozys which paid less than 1 kilogram⁴ of grain per working day decreased considerably, while the number which were able to pay as much as 7 kilograms per working day increased during these 2 years. In 1935, 21.7 percent of all kolkhozys in Siberia paid less than 1 kilogram of grain per working day, and only 2.4 percent paid 7 or more kilograms; while in 1937 the number of kolkhozys paying less than 1 kilogram decreased to 4.7 percent, and the number paying 7 or more kilograms increased to 17 percent. In the eastern areas, more than 37.3 percent of all kolkhozys paid 7 or more kilograms of grain per working day in 1937.

In the entire Soviet Union, earnings in kind per working day in 1937 had increased by 59 percent over those in 1935, and in a number of districts even more. In Siberia these earnings were doubled, and in the central and eastern districts the increase in earnings was still greater.

³ *Izvestia*, Moscow, May 22, 1938 (p. 2).

⁴ Kilogram=2.2046 pounds.

Labor Turn-Over

LABOR TURN-OVER IN MANUFACTURING, MAY 1938

DURING May, when there was a further curtailment in employment in the larger manufacturing industries, the total separation rate was slightly higher than in April, and considerably higher than in May 1937. The discharge rate was somewhat lower than in May of last year, but the number of employees laid off was more than twice as high. Although the lay-off rate was slightly lower than in April, the accession rate was a little higher, as a result of increased hiring in a number of seasonal industries.

The quit rate increased from 0.59 in April to 0.62 per 100 employees in May, but was less than half as high as in May 1937. The discharge rate in May was 0.13 as compared with 0.10 in April and 0.21 in May 1937. The accession rate for May 1938 was 2.84 as compared with 3.56 in May 1937.

Of the 23 industries for which separate rates are published, 11 had lower lay-off rates than in April and 5 had lower lay-off rates than in May 1937. The May accession rate was above that for April in 15 industries. Compared with a year ago 9 industries showed higher accession rates.

All Manufacturing

The Bureau of Labor Statistics' survey of labor turn-over covers more than 5,000 representative manufacturing establishments, which in May employed more than 2,200,000 workers. The rates represent the number of changes in personnel per 100 employees on the pay rolls during the month.

The rates shown in table 1 are compiled from reports received from representative plants in 144 industries. In the 23 industries for which separate rates are shown (see table 2) reports were received from representative plants employing approximately 25 percent of the workers in each industry. These data include, for the first time, turn-over rates for the printing and publishing industry under two classifications—book and job, and newspapers and periodicals.

Table 1 shows the total separation rate classified into quit, discharge, and lay-off rates and the accession rate for each month of 1937 and for the first 5 months in 1938 for manufacturing as a whole. The average monthly rates for 1937 are also presented.

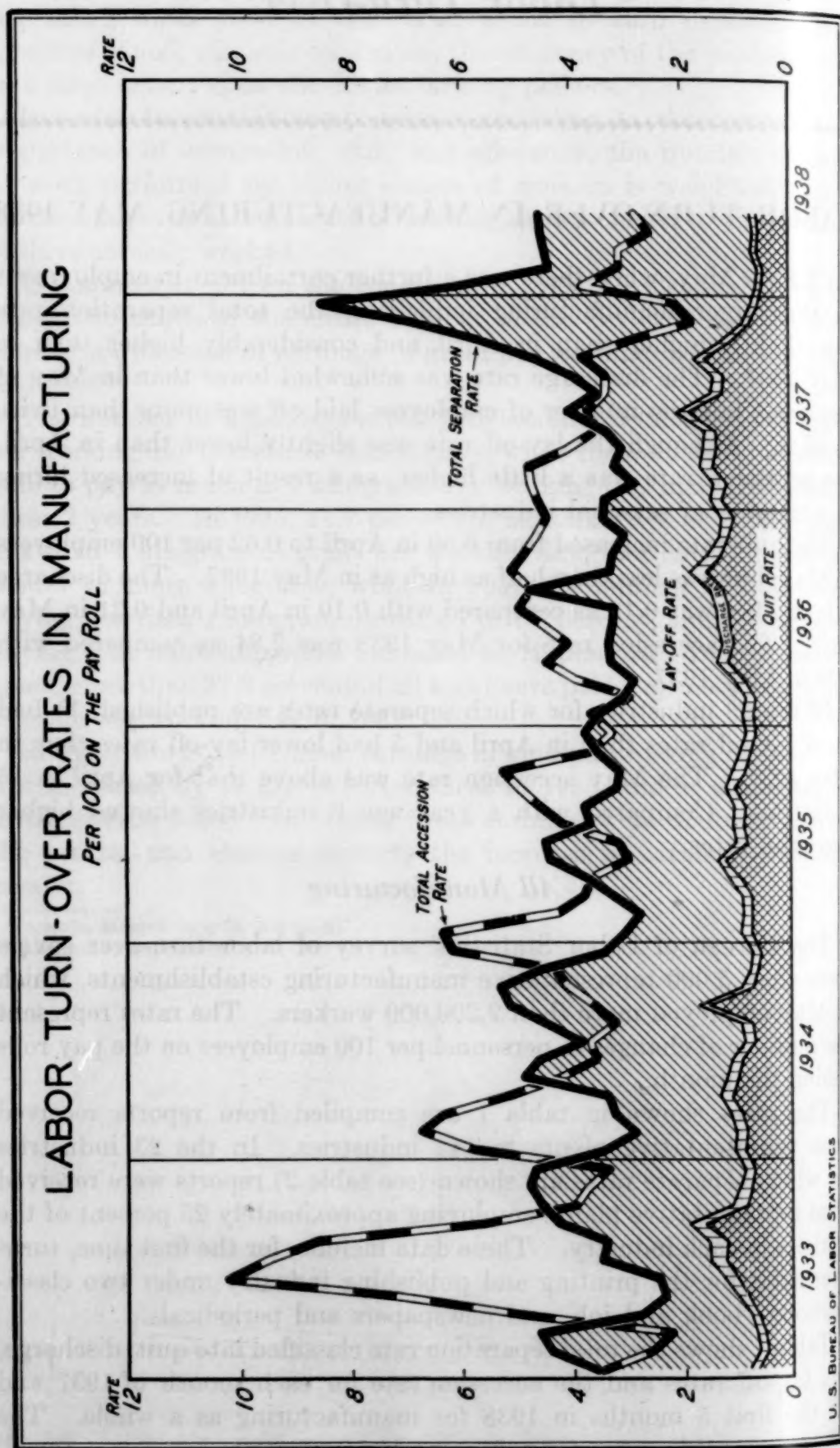


TABLE 1.—Monthly Labor Turn-Over Rates (per 100 Employees) in Representative Factories in 144 Industries

Class of rates and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Quit:													
1938	0.52	0.49	0.61	0.59	0.62								
1937	1.27	1.19	1.43	1.38	1.37	1.89	1.25	1.23	1.59	1.05	0.72	0.60	1.25
Discharge:													
1938	.11	.11	.11	.10	.13								
1937	.21	.22	.24	.23	.21	.19	.21	.19	.19	.19	.16	.14	.20
Lay-off: ¹													
1938	5.45	3.79	3.74	3.85	3.82								
1937	1.90	1.44	1.53	1.48	1.79	1.94	2.06	2.57	2.84	4.45	5.99	7.77	2.98
Total separation:													
1938	6.08	4.39	4.46	4.54	4.57								
1937	3.38	2.85	3.20	3.09	3.37	4.02	3.52	3.99	4.62	5.69	6.87	8.51	4.43
Accession:													
1938	3.78	3.13	3.13	2.58	2.84								
1937	4.60	4.71	4.74	4.04	3.56	3.69	3.36	3.36	3.78	2.84	1.79	2.12	3.55

¹ Including temporary, indeterminate, and permanent lay-offs.

Detailed turn-over rates for 23 selected manufacturing industries are listed in table 2 which gives the number of quits, discharges, and lay-offs, total separations, and total accessions per 100 employees in reporting firms in May and April 1938 and May 1937.

TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in Specified Industries

Class of rates	May 1938	April 1938	May 1937	May 1938	April 1938	May 1937	May 1938	April 1938	May 1937
	Automobiles and bodies			Automobile parts			Boots and shoes		
Quit	0.37	0.47	1.41	0.56	0.46	1.92	0.66	0.68	1.06
Discharge	.05	.04	.17	.06	.09	.35	.08	.12	.19
Lay-off	9.91	4.71	1.81	10.82	6.56	2.92	5.34	2.66	4.78
Total separation	10.33	5.22	3.39	11.44	7.11	5.19	6.08	3.46	6.03
Accession	1.91	2.75	3.09	3.81	5.40	5.53	1.36	1.14	2.52
	Brick, tile, and terra cotta			Cement			Cigars and cigarettes		
Quit	1.26	0.83	1.22	0.71	0.20	1.32	1.09	1.23	2.29
Discharge	.08	.18	.32	.07	.09	.28	.07	.11	.10
Lay-off	5.68	6.24	2.53	8.57	8.90	1.19	.64	1.65	1.16
Total separation	7.02	7.25	4.07	9.35	9.19	2.79	1.80	2.99	3.55
Accession	10.13	10.09	4.92	8.92	11.29	6.26	2.07	2.00	2.46
	Cotton manufacturing			Electrical machinery			Foundries and machine shops		
Quit	0.92	0.83	1.57	0.58	0.47	0.99	0.36	0.39	1.39
Discharge	.18	.14	.33	.11	.08	.19	.08	.07	.33
Lay-off	4.39	3.76	2.46	5.36	9.11	.67	4.78	4.54	1.11
Total separation	5.49	4.73	4.36	6.05	9.66	1.85	5.22	5.00	2.83
Accession	4.09	3.20	3.20	1.32	.96	4.33	1.31	1.69	4.34
	Furniture			Hardware			Iron and steel		
Quit	0.42	0.54	2.48	0.45	0.44	1.93	0.35	0.46	1.04
Discharge	.15	.16	.41	.07	.11	.19	.04	.04	.09
Lay-off	3.71	5.91	2.18	4.32	2.55	1.23	2.75	3.43	.53
Total separation	4.28	6.61	5.07	4.84	3.10	3.35	3.14	3.93	1.66
Accession	4.43	3.52	5.13	.90	.94	3.36	1.37	.83	2.86

TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in Specified Industries—Continued

Class of rates	May 1938	April 1938	May 1937	May 1938	April 1938	May 1937	May 1938	April 1938	May 1937
Quit..... Discharge..... Lay-off..... Total separation..... Accession.....	Knit goods			Men's clothing			Petroleum refining		
	1.47	0.85	1.08	0.75	0.79	1.15	0.19	0.22	0.43
	.10	.09	.12	.04	.03	.04	.07	.07	.06
	2.54	1.90	1.76	9.54	9.04	4.76	1.27	1.05	2.06
	4.11	2.84	2.96	10.33	9.86	5.95	1.53	1.34	2.55
	2.37	2.59	1.75	4.28	1.87	2.15	1.79	1.51	4.06
	Printing and publishing						Radios and phonographs		
	Book and job			Newspapers					
	0.37	0.38	1.01	0.25	0.38	0.49	1.25	0.90	(1)
	.17	.11	.18	.04	.07	.10	.05	.11	(1)
2.77	3.85	3.85	1.02	1.01	1.11	12.19	4.58	(1)	
3.31	4.34	5.03	1.31	1.46	1.70	13.49	5.59	(1)	
2.96	2.05	5.10	1.48	2.04	3.02	6.68	4.67	(1)	
Quit..... Discharge..... Lay-off..... Total separation..... Accession.....	Rayon			Rubber tires			Sawmills		
	0.43	0.63	1.07	0.71	0.54	0.70	1.12	1.02	2.88
	.25	.18	.16	.02	.02	.09	.24	.18	.29
	1.53	4.60	.31	1.02	2.50	.85	5.17	4.72	2.35
	2.21	5.41	1.54	1.75	3.06	1.64	6.53	5.92	5.52
	3.94	2.36	3.11	1.92	1.65	1.02	5.19	6.99	7.84
	Slaughtering and meat packing			Woolen and worsted goods					
	0.45	0.48	0.89	0.74	0.68	0.93			
	.14	.18	.23	.05	.05	.14			
	4.51	6.14	5.07	4.97	7.15	4.22			
5.10	6.80	6.19	5.76	7.88	5.29				
7.29	6.42	5.70	13.93	5.08	5.23				

¹ Data not available.

Employment Offices

OPERATIONS OF UNITED STATES EMPLOYMENT SERVICE, JUNE 1938

Summary

FED by a sharply increased volume of current applications for employment, the file of active applicants of the United States Employment Service rose during June 4.1 percent above the May level to a 2-year high of 7,830,940. This marked the eighth successive increase in the file. At the same time, in the absence of any general revival of employment, the number of persons placed, although totaling nearly a quarter of a million, declined slightly from May.

The increase in applications from May to June was at least partly seasonal; a similar increase has been recorded in each of the last 4 years. This is especially true of new applications, i.e., persons registering with the Service for the first time, which normally increase after the close of the school year. New applications in June were 13.8 percent more than in May, compared to an increase of 16.5 percent in the corresponding months in 1937 and 20 percent in 1936. The total volume of applications, both new and renewed, exceeded a million for the sixth consecutive month and were more than double the number for June 1937 and 75 percent greater than for June 1936.

A spring peak in the number of persons placed is customarily reached in May, followed by a decline in June. The decline in June 1938 (1.2 percent) was smaller than in either of the 2 preceding years, but the volume of placements remained one-third below the 1937 level. Placements in public employment, though slightly increased from May, were only a little more than half as numerous as in June 1937. The decline from May to June was principally in placements in private employment, which dropped 1.5 percent to 163,772. Most of the drop was in placements of women in temporary employment. Placements of men, in both temporary and regular employment, remained almost unchanged from May. Nevertheless, the total of private placements was one-fourth below the level of June 1937.

The active file of war veterans at the end of June was 443,198, or 1.7 percent less than the May total. Placements of veterans during the month numbered 13,644, a decline of 6 percent from the preceding

month. Veterans placed in private employment, however, were only 2 percent fewer in June than in May. Applications were unchanged at 50,207.

TABLE 1.—*Summary of Operations of United States Employment Service, June 1938*

Activity	Number	Percent of change from—		
		May 1938 ¹	June 1937	June 1936
Total applications.....	1,364,455	+9.8	+103.4	+75.4
New applications.....	803,470	+13.8	+137.8	+117.0
Renewals.....	560,985	+4.5	+68.5	+37.6
Total placements.....	246,285	-1.2	-34.2	-48.0
Private.....	163,772	-1.5	-27.1	+32.6
Public.....	76,724	+1.1	-46.5	-71.3
Relief.....	5,789	-19.0	-4.1	-93.0
Active file (at end of month).....	7,830,940	+4.1	+56.1	+20.5

¹ Adjusted for number of working days in months.

TABLE 2.—*Summary of Veterans' Activities, June 1938*

Activity	Number	Percent of change from—		
		May 1938 ¹	June 1937	June 1936
Total applications.....	50,207	+0.3	+64.2	+49.2
New applications.....	23,109	-4.7	+145.5	+238.3
Renewals.....	27,098	+4.9	+28.1	+1.0
Total placements.....	13,644	-6.0	-37.8	-52.2
Private.....	7,303	-2.0	-33.2	-54.2
Public.....	5,800	-7.4	-45.5	-70.7
Relief.....	541	-32.2	+43.5	-86.6
Active file (at end of month).....	443,198	-1.7	+63.0	+22.3

¹ Adjusted for number of working days in months.

Trend During 1937-38

The recent record of unemployment is clearly reflected in the reports of the Employment Service for the year ending June 30, 1938. The introduction of unemployment-benefit payments in many States early in 1938 would have increased the coverage of the employment offices in any event; but applications began to rise before benefits were payable and in States where payments have not yet begun. Early in the fall of 1937 an increase in the volume of applications was evident. This continued at an accelerated pace during the winter and spring, bringing the 1937-38 total of applications above 12 million, an increase of 43 percent over the preceding year. More than half of these were from applicants never previously registered with the Service, who increased by nearly 70 percent for the year.

The active file at the end of June 1938 was 56 percent above the corresponding figure for 1937. That this was not entirely the result of benefit payments is evident from the rise of 31 percent in the active file of a selected group of non-benefit-paying States, compared to 82 percent in a comparable group of States in which benefits were being paid.

Nearly 3 million placements were effected by the Service during the year, almost a third short of the total for the year before. The greatest declines, however, were in placements in public employment at prevailing wages and on relief projects. In spite of unfavorable conditions, private placements during 1937-38 numbered just under 2 million, only 6.6 percent below the level of the preceding year.

Detailed Reports of Activities During June 1938

Detailed data on the activities of the Service are given in tables 3 and 4.

TABLE 3.—Operations of United States Employment Service, June 1938
TOTAL

Division and State	Placements					Field visits	Applications			Active file, June 30, 1938	Personal visits
	Total ¹	Private			Public		Total	New			
		Number	Per- cent of change from May ²	Regu- lar (over 1 month)				Number	Per- cent of change from May ²		
United States..	246, 285	163, 772	-1	68, 399	76, 724	129, 596	1, 364, 455	803, 470	+14	7, 830, 940	10,136,571
New England..	9, 240	6, 573	-4	4, 511	2, 609	4, 794	95, 464	64, 313	+9	769, 014	1, 287, 883
Maine.....	2, 135	1, 104	+84	899	1, 031	1, 654	10, 963	5, 222	+11	46, 461	108, 998
N. H.....	1, 430	1, 099	-26	816	331	543	8, 258	4, 089	+5	44, 876	82, 745
Vermont....	994	641	-0	398	352	390	3, 748	1, 666	-11	20, 944	22, 130
Mass.....	1, 574	1, 146	-25	780	428	941	30, 853	22, 894	+2	381, 517	611, 478
R. I.....	657	596	+13	423	42	265	19, 736	15, 432	+26	89, 698	201, 419
Connecticut..	2, 450	1, 987	-6	1, 195	425	1, 001	21, 906	15, 010	+10	185, 518	261, 113
Mid. Atlantic..	29, 322	21, 403	-8	9, 855	6, 716	11, 505	347, 561	216, 155	+6	2, 121, 641	2, 658, 149
New York....	15, 403	12, 177	-7	5, 225	2, 485	3, 470	206, 024	123, 721	+3	634, 284	1, 296, 556
New Jersey...	3, 382	2, 981	-4	1, 437	392	2, 525	38, 869	20, 190	+17	239, 192	92, 221
Pa.....	10, 537	8, 245	-10	3, 193	3, 839	5, 510	102, 668	72, 244	+6	1, 248, 165	1, 269, 372
E. N. Central..	34, 965	26, 297	-11	12, 383	7, 393	21, 381	304, 630	182, 331	+33	1, 514, 403	1, 353, 524
Ohio.....	8, 538	5, 821	-18	2, 689	2, 576	5, 325	58, 852	34, 491	+20	437, 053	225, 294
Indiana.....	4, 967	4, 357	+6	2, 363	610	4, 161	51, 002	36, 306	+13	189, 493	416, 051
Illinois.....	11, 180	9, 475	-16	3, 577	1, 391	7, 228	60, 045	24, 119	+14	344, 321	181, 585
Michigan.....	4, 082	2, 178	-20	1, 041	1, 386	2, 193	91, 878	70, 415	+71	406, 933	300, 550
Wisconsin....	6, 198	4, 466	+4	2, 713	1, 430	2, 474	42, 853	17, 000	+22	136, 603	230, 044
W. N. Central..	26, 766	14, 351	+2	6, 431	11, 908	14, 215	104, 895	49, 405	+18	687, 868	417, 316
Minnesota....	5, 333	4, 070	+9	2, 226	1, 144	4, 085	30, 473	12, 116	+16	211, 900	183, 574
Iowa.....	6, 219	3, 146	-8	1, 226	2, 855	2, 888	21, 516	10, 795	+22	86, 554	73, 928
Missouri....	4, 043	2, 516	-10	1, 156	1, 526	2, 770	25, 394	14, 274	+18	203, 816	63, 003
N. Dak.....	2, 160	1, 388	+4	707	769	976	5, 048	2, 196	+41	30, 659	22, 894
S. Dak.....	1, 864	647	+9	281	1, 208	492	4, 284	2, 040	+15	39, 718	14, 586
Nebraska....	3, 967	1, 318	+8	530	2, 648	1, 737	8, 594	3, 977	+12	54, 129	32, 807
Kansas.....	3, 180	1, 266	+35	305	1, 758	1, 267	9, 586	4, 007	+11	61, 092	26, 524
South Atlantic..	31, 160	15, 308	-15	8, 110	15, 389	12, 687	155, 379	96, 284	+8	940, 067	1, 485, 917
Delaware....	1, 353	910	-2	200	437	497	3, 184	1, 340	+9	13, 499	12, 344
Maryland....	3, 078	2, 080	+8	1, 335	998	1, 821	19, 306	13, 143	+22	92, 673	249, 326
D. C.....	2, 355	2, 215	-10	1, 002	140	130	14, 223	5, 440	+26	43, 984	79, 094
Virginia....	4, 558	2, 375	-40	1, 741	2, 136	2, 096	18, 290	11, 572	-11	89, 707	162, 735
W. Va.....	2, 917	1, 207	+0	770	1, 675	1, 202	24, 635	18, 567	-8	228, 610	369, 470
N. C.....	7, 222	4, 155	-14	2, 059	3, 062	2, 245	31, 448	20, 820	+21	162, 206	485, 575
S. C.....	2, 887	708	+21	311	2, 161	1, 457	14, 426	7, 866	+17	83, 222	54, 771
Georgia.....	5, 325	1, 658	-23	692	3, 646	3, 028	21, 583	11, 431	+11	145, 506	47, 974
Florida.....	1, 465	0	-----	0	1, 134	211	8, 284	6, 105	+18	89, 690	23, 628
E. S. Central..	16, 793	6, 575	-15	4, 081	10, 037	5, 149	83, 215	51, 517	+17	518, 311	614, 043
Kentucky....	3, 178	810	-35	389	2, 243	587	16, 424	8, 533	-4	120, 990	29, 742
Tennessee...	4, 309	2, 399	+6	1, 520	1, 910	2, 066	16, 484	12, 006	+36	159, 698	232, 912
Alabama....	3, 553	1, 759	-41	1, 049	1, 745	1, 150	27, 685	17, 628	+17	174, 721	231, 427
Mississippi...	5, 753	1, 607	+31	1, 123	4, 139	1, 346	22, 622	13, 350	+20	62, 902	119, 962

¹ Includes 5,780 security-wage placements on work-relief projects.

² Adjusted for number of working days in months.

TABLE 3.—Operations of United States Employment Service, June 1938—Continued

TOTAL—Continued

Division and State	Placements					Field visits	Applications			Active file, June 30, 1938	Personal visits
	Total	Private			Public		Total	New			
		Number	Per- cent of change from May	Regu- lar (over 1 month)				Number	Per- cent of change from May		
W. S. Central.....	47,496	39,530	-4	8,771	7,660	34,109	112,202	61,392	+7	462,983	991,902
Arkansas.....	3,303	2,726	-38	307	391	1,011	7,555	4,918	-0	71,174	21,640
Louisiana.....	2,667	1,926	-33	1,321	740	1,960	23,202	15,686	+4	110,074	152,378
Oklahoma.....	6,222	5,273	-2	569	926	1,401	10,542	4,742	+3	36,944	40,635
Texas.....	35,304	29,605	+5	6,574	5,603	29,737	70,903	36,046	+11	244,791	777,249
Mountain.....	19,889	13,034	+58	5,105	6,764	7,975	52,971	23,296	+40	206,951	275,946
Montana.....	3,315	1,739	+126	997	1,559	1,814	8,682	3,694	+134	37,885	45,577
Idaho.....	3,227	2,374	+63	530	853	1,030	9,102	3,349	+49	10,703	29,498
Wyoming.....	1,439	530	+13	286	888	316	3,689	1,241	+11	8,448	17,976
Colorado.....	5,818	4,697	+74	1,617	1,106	1,674	12,297	5,425	+19	58,951	57,208
New Mexico.....	1,374	673	-21	300	695	1,377	3,626	2,129	+24	29,330	23,328
Arizona.....	1,740	1,145	+36	594	565	643	6,834	3,291	+35	29,510	49,000
Utah.....	1,929	1,300	+120	366	627	486	6,725	3,349	+46	28,205	44,122
Nevada.....	1,047	576	+2	415	471	635	2,016	818	+20	3,919	9,237
Pacific.....	28,456	20,379	+17	9,031	8,004	17,449	106,321	57,190	+3	593,490	1,040,090
Washington.....	2,788	2,009	+72	569	726	1,410	11,843	6,452	+7	119,250	62,838
Oregon.....	5,019	3,749	+82	2,590	1,270	2,138	12,557	8,635	+10	98,132	159,314
California.....	20,649	14,621	+3	5,872	6,008	13,901	81,921	42,103	+1	376,108	817,938
Alaska.....	1,524	120	+7	52	151	146	740	602	-2	1,982	8,727
Hawaii.....	674	202	+104	69	93	186	1,077	985	+2	5,230	3,074

MEN

Division and State	Placements					Applications			Active file, June 30, 1938
	Total ¹	Private			Public	Total	New		
		Num- ber	Percent of change from May ²	Regular (over 1 month)			Num- ber	Percent of change from May ²	
United States.....	175,323	94,153	-0	31,613	75,766	993,854	554,278	+10	6,173,178
New England.....	5,732	3,114	-13	2,113	2,567	60,856	37,732	+9	548,461
Maine.....	1,470	442	+43	335	1,028	8,078	3,394	+22	35,438
New Hampshire.....	1,109	796	-28	602	313	5,224	2,303	-1	31,903
Vermont.....	650	297	-7	160	352	2,744	1,133	-23	16,159
Massachusetts.....	930	509	-21	326	421	20,627	14,658	+6	276,560
Rhode Island.....	260	211	+1	134	37	11,173	7,874	+32	57,232
Connecticut.....	1,313	859	-13	556	416	13,010	8,370	+2	131,169
Middle Atlantic.....	18,200	10,443	-5	4,429	6,597	236,430	136,336	-2	1,625,383
New York.....	9,412	6,210	-8	2,427	2,466	135,746	74,237	-4	447,484
New Jersey.....	1,251	854	-3	400	388	27,452	13,752	+11	192,798
Pennsylvania.....	7,537	3,379	-2	1,533	3,743	73,232	48,347	-2	985,101
East North Central.....	20,184	11,738	-14	4,553	7,276	232,813	137,923	+28	1,271,789
Ohio.....	5,066	2,404	-25	946	2,538	45,335	26,301	+17	372,025
Indiana.....	2,414	1,815	+13	724	599	36,630	26,113	+6	154,204
Illinois.....	5,951	4,316	-20	1,365	1,374	43,808	15,723	+9	277,718
Michigan.....	2,896	1,021	-29	347	1,366	75,650	58,213	+64	359,455
Wisconsin.....	3,857	2,182	+9	1,171	1,399	31,390	11,573	+15	108,387

¹ Includes 5,404 security-wage placements on work-relief projects.² Adjusted for number of working days in months.

TABLE 3.—Operations of United States Employment Service, June 1938—Continued

MEN—Continued

Division and State	Placements				Applications			Active file, June 30, 1938	
	Total	Private			Public	Total	New		
		Number	Percent of change from May	Regular (over 1 month)			Number		Percent of change from May
West North Central.....	19,925	7,661	+3	2,723	11,793	77,459	33,125	+9	557,738
Minnesota.....	3,092	1,859	+8	1,029	1,129	22,112	7,794	+4	168,009
Iowa.....	4,689	1,651	-11	468	2,837	15,976	7,467	+11	70,716
Missouri.....	2,852	1,327	-10	434	1,524	18,857	10,056	+14	167,464
North Dakota.....	1,503	742	-6	327	758	3,636	1,320	+23	24,661
South Dakota.....	1,554	370	-3	126	1,178	3,076	1,187	-3	32,271
Nebraska.....	3,410	795	+17	233	2,614	6,469	2,656	+5	45,297
Kansas.....	2,825	917	+78	106	1,753	7,333	2,645	+3	49,320
South Atlantic.....	23,423	7,834	-11	3,484	15,252	114,009	67,761	+2	729,808
Delaware.....	831	389	+11	80	436	2,255	892	+14	10,181
Maryland.....	2,185	1,189	+4	687	996	13,232	8,413	+13	71,658
District of Columbia.....	953	836	-15	314	117	9,376	3,268	+23	29,698
Virginia.....	3,411	1,247	-18	876	2,127	13,493	8,167	-13	66,901
West Virginia.....	2,309	625	+22	418	1,665	19,534	14,269	-19	200,318
North Carolina.....	4,971	1,975	-21	613	2,993	21,044	13,418	+19	109,094
South Carolina.....	2,621	460	+29	151	2,150	11,199	5,865	+8	64,255
Georgia.....	4,754	1,113	-22	345	3,635	17,381	8,974	+14	111,164
Florida.....	1,388	0	-----	0	1,133	6,495	4,495	+15	66,539
East South Central.....	13,991	3,911	-14	2,208	9,925	66,105	39,513	+17	417,118
Kentucky.....	2,666	380	-48	133	2,181	12,691	6,285	-9	97,977
Tennessee.....	3,149	1,241	+21	742	1,908	12,073	9,011	+36	125,756
Alabama.....	3,011	1,257	-37	624	1,709	22,357	13,702	+14	141,087
Mississippi.....	5,165	1,033	+32	709	4,127	18,984	10,515	+25	52,298
West South Central.....	35,054	27,180	-6	3,633	7,579	84,390	44,645	+7	374,325
Arkansas.....	2,353	1,780	-40	59	387	5,886	3,781	+7	58,721
Louisiana.....	1,727	992	-39	655	735	17,549	11,581	+1	90,500
Oklahoma.....	4,190	3,281	-4	111	895	8,169	3,413	-2	30,915
Texas.....	26,784	21,127	+1	2,808	5,562	52,786	25,870	+11	194,189
Mountain.....	16,254	9,457	+66	3,392	6,717	42,426	17,014	+33	174,028
Montana.....	3,045	1,489	+149	832	1,544	7,540	2,864	+130	32,785
Idaho.....	2,643	1,798	+77	302	845	7,799	2,706	+48	9,458
Wyoming.....	1,259	353	+17	190	886	3,067	898	-3	7,036
Colorado.....	4,462	3,352	+84	988	1,096	8,931	3,415	+6	46,904
New Mexico.....	1,160	469	-24	159	687	2,916	1,583	+31	24,718
Arizona.....	1,350	760	+76	411	562	5,290	2,569	+29	25,836
Utah.....	1,450	821	+79	205	627	5,251	2,386	+28	23,921
Nevada.....	885	415	-5	305	470	1,632	593	+8	3,370
Pacific.....	20,458	12,584	+16	4,999	7,817	77,805	38,883	+1	468,026
Washington.....	2,178	1,418	+83	250	715	9,144	4,702	+3	104,019
Oregon.....	4,024	2,757	+71	1,745	1,267	9,683	6,292	+5	80,991
California.....	14,256	8,409	-1	3,004	5,835	58,978	27,889	-0	283,916
Alaska.....	1,516	112	+7	48	151	704	570	-2	1,845
Hawaii.....	586	119	+47	31	92	857	776	-11	4,657

* Partially estimated.

TABLE 3.—Operations of United States Employment Service, June 1938—Continued

WOMEN								
Division and State	Placements				Applications			Active file June 30, 1938
	Total ¹	Private			Total	New		
		Num- ber	Percent of change from May ²	Regular (over 1 month)		Num- ber	Percent of change from May ²	
United States.....	70,962	69,619	-3	36,786	370,601	249,192	+24	1,657,762
New England.....	3,508	3,459	+5	2,398	34,608	26,581	+10	220,553
Maine.....	665	662	+127	564	2,885	1,828	-6	11,023
New Hampshire.....	321	303	-19	214	3,034	1,786	+14	12,973
Vermont.....	344	344	+7	238	1,004	533	+34	4,785
Massachusetts.....	644	637	-28	454	10,226	8,236	-4	104,957
Rhode Island.....	397	385	+21	289	8,563	7,558	+20	32,466
Connecticut.....	1,137	1,128	+1	639	8,896	6,640	+24	54,349
Middle Atlantic.....	11,122	10,960	-10	5,426	111,131	79,819	+21	496,258
New York.....	5,991	5,967	-7	2,798	70,278	49,484	+16	186,800
New Jersey.....	2,131	2,127	-4	968	11,417	6,438	+31	46,394
Pennsylvania.....	3,000	2,866	-17	1,660	29,436	23,897	+27	263,064
East North Central.....	14,781	14,559	-8	7,830	71,817	44,408	+50	242,614
Ohio.....	3,472	3,417	-12	1,743	13,517	8,190	+30	65,028
Indiana.....	2,553	2,542	+2	1,639	14,372	10,193	+40	35,289
Illinois.....	5,229	5,159	-12	2,212	16,237	8,396	+26	66,603
Michigan.....	1,186	1,157	-10	694	16,228	12,202	+121	47,478
Wisconsin.....	2,341	2,284	-1	1,542	11,463	5,427	+43	28,216
West North Central.....	6,841	6,690	+1	3,708	27,436	16,280	+41	130,130
Minnesota.....	2,241	2,211	+10	1,197	8,361	4,322	+44	43,891
Iowa.....	1,530	1,495	-5	758	5,540	3,328	+58	15,838
Missouri.....	1,191	1,189	-10	722	6,537	4,218	+28	36,352
North Dakota.....	657	646	+20	380	1,412	876	+81	5,998
South Dakota.....	310	277	+30	155	1,208	853	+54	7,447
Nebraska.....	557	523	-4	297	2,125	1,321	+30	8,832
Kansas.....	355	349	-17	199	2,253	1,362	+29	11,772
South Atlantic.....	7,737	7,474	-19	4,626	41,370	28,523	+26	219,259
Delaware.....	522	521	-10	120	929	448	-1	3,318
Maryland.....	893	891	+14	648	6,074	4,730	+41	21,015
District of Columbia.....	1,402	1,379	-7	688	4,847	2,172	+30	14,286
Virginia.....	1,147	1,128	-54	865	4,797	3,405	-5	22,806
West Virginia.....	608	582	-15	352	5,101	4,298	+65	28,292
North Carolina.....	2,251	2,180	-6	1,446	10,404	7,402	+25	53,112
South Carolina.....	266	248	+10	160	3,227	2,001	+52	18,967
Georgia.....	571	545	-24	347	4,202	2,457	+3	34,342
Florida.....	77	0	-----	0	1,789	1,610	+29	23,121
East South Central.....	2,802	2,664	-16	1,873	17,110	12,004	+21	101,193
Kentucky.....	512	430	-17	256	3,733	2,248	+13	23,013
Tennessee.....	1,160	1,158	-7	778	4,411	2,995	+37	33,942
Alabama.....	542	502	-49	425	5,328	3,926	+28	33,634
Mississippi.....	588	574	+31	414	3,638	2,835	+5	10,604
West South Central.....	12,442	12,350	+2	5,138	27,812	16,747	+8	88,658
Arkansas.....	950	946	-34	248	1,669	1,137	-19	12,453
Louisiana.....	940	934	-25	666	5,653	4,105	+14	19,574
Oklahoma.....	2,032	1,992	+1	458	2,373	1,329	+18	6,029
Texas.....	8,520	8,478	+13	3,766	18,117	10,176	+9	50,602
Mountain.....	3,635	3,577	+39	1,713	10,545	6,282	+66	32,923
Montana.....	270	250	+45	165	1,142	830	+150	5,100
Idaho.....	584	576	+32	228	1,303	643	+56	1,245
Wyoming.....	180	177	+5	96	622	343	+75	1,412
Colorado.....	1,356	1,345	+52	629	3,366	2,010	+50	12,047
New Mexico.....	214	204	-15	141	710	546	+7	4,612
Arizona.....	390	385	-6	183	1,544	722	+64	3,674
Utah.....	479	479	+263	161	1,474	963	+128	4,284
Nevada.....	162	161	+28	110	384	225	+68	549
Pacific.....	7,998	7,795	+19	4,032	28,516	18,307	+8	125,464
Washington.....	610	591	+49	319	2,699	1,750	+20	15,231
Oregon.....	995	992	+124	845	2,874	2,343	+26	18,041
California.....	6,393	6,212	+9	2,868	22,943	14,214	+4	92,192
Alaska.....	8	8	+14	4	36	32	-3	137
Hawaii.....	88	83	+361	38	220	209	+120	573

¹ Includes 958 public placements and 385 security-wage placements on work-relief projects.² Adjusted for number of working days in months.³ Partially estimated.

TABLE 4.—Operations of United States Employment Service, June 1938
VETERANS

Division and State	Placements					Applications			Active file, June 30, 1938
	Total ¹	Private			Public	Total	New		
		Number	Percent change from May ²	Regular (over 1 month)			Number	Percent change from May ²	
United States.....	13,644	7,303	-2	1,990	5,800	50,207	23,109	-5	443,198
New England.....	461	260	-6	150	164	3,243	1,890	-1	42,240
Maine.....	83	25	+39	17	58	343	142	+13	3,030
New Hampshire.....	85	58	-18	32	27	306	134	-9	2,395
Vermont.....	38	22	-12	11	16	124	47	-41	960
Massachusetts.....	55	32	-29	20	23	1,335	860	-3	23,818
Rhode Island.....	31	29	+4	10	2	538	362	+27	3,740
Connecticut.....	169	94	+6	60	38	597	345	-10	8,297
Middle Atlantic.....	1,142	629	-5	235	411	7,779	3,782	-17	90,382
New York.....	577	358	-4	104	161	2,962	1,342	-24	21,876
New Jersey.....	92	68	+10	34	23	1,276	385	+1	12,639
Pennsylvania.....	473	203	-10	97	227	3,541	2,055	-14	55,867
East North Central.....	1,769	958	-21	288	689	13,164	6,778	+11	103,450
Ohio.....	467	195	-31	50	256	2,809	1,392	+13	29,993
Indiana.....	184	128	+2	45	56	2,111	1,428	-1	13,682
Illinois.....	539	402	-21	92	113	2,797	833	+0	24,442
Michigan.....	257	91	-37	37	109	3,295	2,409	+29	27,015
Wisconsin.....	322	142	-3	64	155	2,152	716	-2	8,318
West North Central.....	1,841	819	+3	181	910	5,138	1,728	-8	49,667
Minnesota.....	254	145	+21	57	96	1,760	448	-15	14,585
Iowa.....	662	324	-1	50	258	1,122	449	+11	6,335
Missouri.....	205	110	-14	27	95	1,141	513	-5	16,244
North Dakota.....	102	36	-33	15	64	149	38	-3	1,601
South Dakota.....	167	54	+15	9	113	167	42	-18	2,549
Nebraska.....	191	60	-2	14	130	304	115	-26	3,836
Kansas.....	260	90	+53	9	154	495	123	-21	4,517
South Atlantic.....	1,533	539	-20	225	976	5,213	2,491	-15	44,473
Delaware.....	42	19	-27	6	22	114	24	-40	851
Maryland.....	179	97	-12	47	82	646	315	-3	4,679
District of Columbia.....	122	91	-28	14	31	824	290	+3	3,257
Virginia.....	206	97	-16	71	107	613	292	+16	4,139
West Virginia.....	274	55	+34	33	218	864	514	-37	10,224
North Carolina.....	238	86	-24	28	152	648	326	-12	4,634
South Carolina.....	162	35	+67	10	125	474	200	-6	3,512
Georgia.....	241	59	-52	16	181	634	260	-7	6,919
Florida.....	69	0	-----	0	58	396	270	+9	6,258
East South Central.....	777	203	-29	84	555	2,698	1,341	-4	27,472
Kentucky.....	289	36	-57	11	237	758	227	-8	7,836
Tennessee.....	183	67	-18	18	116	532	377	+14	8,641
Alabama.....	174	63	-20	32	108	895	451	-13	8,483
Mississippi.....	131	37	-12	23	94	513	286	-5	2,512
West South Central.....	2,584	2,001	+2	235	554	4,408	1,892	-1	27,582
Arkansas.....	197	164	-39	4	21	290	157	-2	4,055
Louisiana.....	123	75	-43	47	48	844	353	-15	6,329
Oklahoma.....	352	279	-5	12	72	659	296	+30	4,342
Texas.....	1,912	1,483	+16	172	413	2,615	1,086	-1	12,856
Mountain.....	1,242	550	+32	202	683	2,665	824	+9	13,740
Montana.....	275	102	+122	58	173	524	170	+56	2,679
Idaho.....	228	114	+13	22	114	524	129	+34	657
Wyoming.....	100	24	+60	13	76	196	45	-33	539
Colorado.....	262	189	+75	47	72	576	177	-4	3,604
New Mexico.....	87	27	-39	3	60	172	73	+1	1,977
Arizona.....	86	37	+37	23	42	267	125	+9	2,236
Utah.....	118	20	-52	10	97	309	90	+23	1,805
Nevada.....	86	37	+9	26	49	97	15	-58	243
Pacific.....	2,168	1,321	+14	383	844	5,814	2,310	-17	43,699
Washington.....	193	125	+12	18	65	637	291	+0	9,680
Oregon.....	344	220	+73	123	124	469	226	-26	6,586
California.....	1,631	976	+6	242	655	4,708	1,793	-18	27,433
Alaska.....	82	11	+175	3	9	25	19	-40	* 135
Hawaii.....	45	12	+500	4	5	60	54	+15	358

¹ Includes 541 security-wage placements on work-relief projects.² Adjusted for number of working days in months.³ Partially estimated.

Trend of Employment and Pay Rolls

SUMMARY FOR JUNE 1938

Total Nonagricultural Employment

THERE was a further decline of about 60,000 in nonagricultural employment in June, due primarily to reductions in factory working forces. In other major lines of activity employment was relatively stable except for seasonal changes. The figures do not take account of workers in agriculture or on Works Progress Administration and other Federal Emergency Projects.

Most of the larger industrial States of the East and North reported employment declines in June, including Michigan, Massachusetts, New York, and Pennsylvania. Among the industries contributing to the decline were automobiles, steel, machinery, shoes, textiles, and clothing.

There was an increase during June in the number of workers engaged on most of the works programs financed from Federal funds, as industrial employment continued to decline. The most marked gains occurred on work projects of the National Youth Administration, on Federal projects under The Works Program, and on construction projects financed from regular Federal appropriations. In the regular services of the Federal Government increases occurred in the executive and legislative services and decreases occurred in the judicial and military services.

Industrial and Business Employment

In manufacturing industries, it is estimated that about 132,000 wage earners were laid off between mid-May and mid-June, a reduction of 1.9 percent. Factory pay rolls were reduced by 2.9 percent or approximately \$4,100,000 a week. Ordinarily factory employment and pay rolls decline from May to June, as indicated by the fact that during the period 1919 to 1937, inclusive, June employment has shown declines 10 times and June pay rolls 11 times. Since June 1937, when factories were operating near recovery peak levels, the number of wage earners in factories had been reduced by one-fourth or 2,110,000 and weekly pay rolls by 35 percent or \$72,600,000.

As in earlier months, the principal declines in manufacturing employment were reported by the heavy industries; particularly in machinery, steel products, automobiles, and railroad repair shops. The durable goods industries as a group reduced employment by 3.5 percent from May, while the nondurable goods industries reported a decline of 0.8 percent. Seasonal curtailments reduced forces in factories manufacturing women's clothing, shoes, and silk, while labor disputes affected carpet mills and rayon factories.

Most of the manufacturing employment gains were seasonal, such as those in canning, ice cream, and other food industries. Increases in woolen mills, shirt factories, and millwork were either greater than seasonal or contraseasonal.

In the nonmanufacturing industries employment changes were, for the most part, small. Mining employment was generally curtailed except for anthracite mines, which added 4,600 men, a gain of 6.0 percent. About 10,000 bituminous-coal miners and 3,000 metal miners were laid off as business slackened, and year-round hotels had 5,000 fewer workers. Retail and wholesale firms reduced their staffs by 7,000 and 1,600 employees, respectively, largely because of seasonal declines in sales. The principal reductions in retail trade employment were reported by firms dealing in general merchandise (0.5 percent), automobiles and accessories (1.2 percent), furniture (1.6 percent), farmers' supplies (6.5 percent), and jewelry (1.4 percent). Small seasonal increases were reported by retail stores dealing in food, apparel, lumber and building materials, and coal, wood, and ice. Wholesale firms selling dry goods and apparel had 1.8 percent fewer employees, and wholesale dealers in furniture and housefurnishings reported a reduction of 0.7 percent in their forces. A seasonal expansion in employment was reported by wholesale firms selling lumber and building materials, farm products, groceries and other food products, tobacco, and petroleum and petroleum products.

Public utility companies as a group reported virtually no change in employment as the declines reported by telephone and telegraph companies and firms operating electric railroads and motorbuses were offset by the gain in light and power companies.

Employment in the private building construction industry (which does not include construction projects financed by the Public Works Administration or the Reconstruction Finance Corporation, or by regular appropriations of the Federal, State, and local governments) showed an increase of 0.2 percent, as against June gains ranging from 3 to 6 percent in recent years.

Laundries and dyeing and cleaning establishments reported seasonal increases of 0.5 percent and 0.9 percent, respectively; insurance firms had 0.4 percent more employees than in May; and brokerage firms reduced their forces 1.4 percent, a continuation of the monthly declines which began in May 1937.

Class I railroads employed 914,765 workers in June, including executives, officials, and staff assistants, according to a preliminary tabulation by the Interstate Commerce Commission. This was 9,192 workers more than were reported for May, a gain of 1.1 percent. June pay rolls for railroads were not available when this report was prepared. Pay rolls for May amounted to \$138,698,266 and for April to \$139,631,127, a decrease of 0.7 percent.

Hours and earnings.—Factory wage earners averaged 34.4 hours of work per week in June, a decline of 0.2 percent since May. Their average hourly earnings were 64.8 cents or 0.3 percent lower than in the preceding month, and their average weekly earnings (\$22.30) were 1.0 percent lower.

TABLE 1.—*Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, June 1938 (Preliminary Figures)*

Industry	Employment			Pay roll			Average weekly earnings		
	Index, June 1938	Percentage change from—		Index, June 1938	Percentage change from—		Average in June 1938	Percentage change from—	
		May 1938	June 1937		May 1938	June 1937		May 1938	June 1937
All manufacturing industries combined ¹	(1923-25 = 100) 75.9	-1.9	-24.9	(1923-25 = 100) 67.2	-2.9	-34.7	\$22.30	-1.0	-13.1
Class I steam railroads ²	51.2	+1.1	-21.9	(³)	(³)	(³)	(³)	(³)	(³)
Coal mining:	(1929 = 100)			(1929 = 100)					
Anthracite ⁴	56.0	+6.0	-9.2	49.7	+29.9	-10.1	28.94	+22.6	-1.0
Bituminous ⁴	80.1	-2.6	-16.8	57.1	+2.8	-31.5	18.93	+5.5	-17.7
Metalliferous mining.....	55.8	-5.1	-29.8	46.0	-10.2	-40.9	25.49	-5.4	-15.8
Quarrying and nonmetallic mining.....	43.6	-.3	-21.3	37.3	-2.6	-29.1	21.61	-2.3	-9.9
Crude-petroleum producing.....	72.9	-.5	-7.2	67.6	+1.3	-4.0	34.48	+1.8	+3.4
Public utilities:									
Telephone and telegraph.....	74.8	-.3	-4.8	90.9	-.4	+2.6	\$31.08	-.1	+7.8
Electric light and power and manufactured gas.....	92.2	+6	-4.2	98.7	+1.3	-1.7	\$33.72	+7	+2.6
Electric-railroad and motor-bus operation and maintenance.....	70.4	-.4	-4.0	69.6	-2.2	-2.1	\$32.39	-1.8	+2.0
Trade:									
Wholesale.....	87.2	-.2	-3.4	73.6	-2.1	-3.6	\$29.58	-1.9	-.2
Retail.....	83.6	-.2	-7.6	69.5	-.7	-6.6	\$21.46	-.5	+1.1
General merchandising.....	91.9	-1.5	-10.6	84.3	-.2	-8.9	\$18.22	+3	+1.9
Other than general merchandising.....	81.4	-.1	-6.6	66.4	-.8	-5.9	\$24.11	-.7	+8
Hotels (year-round) ^{4,5}	92.1	-1.7	-2.4	79.4	-1.3	-.9	\$14.89	+3	+1.6
Laundries.....	96.6	+5	-7.0	81.8	+1.1	-6.5	17.26	+7	+5
Dyeing and cleaning ⁴	110.9	+9	-6.4	83.3	+3.2	-9.7	20.98	+2.3	-3.5
Brokerage.....	(³)	-1.4	-18.8	(³)	-1.6	-26.4	\$33.87	-.2	-9.3
Insurance.....	(³)	+4	+2.1	(³)	+9	-2.8	\$36.30	+5	-4.8
Building construction.....	(³)	+2	-30.4	(³)	+1.1	-30.7	29.43	+1.0	-.3

¹ Revised indexes; adjusted to 1933 Census of Manufactures.

² Preliminary; source—Interstate Commerce Commission.

³ Not available.

⁴ Indexes adjusted to 1935 Census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet, "Employment and Pay Rolls."

⁵ Average weekly earnings not strictly comparable with figures published in issues of the Monthly Labor Review dated earlier than April 1938 (except for the January figures appearing in the April issue), as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁶ Cash payments only; the additional value of board, room, and tips cannot be computed.

More hours worked per week were reported by 9 of the 14 non-manufacturing industries for which man-hour data are available.

The outstanding increase was 20.7 percent in anthracite mining. Average hourly earnings were slightly larger for 7 of the nonmanufacturing industries and average weekly earnings were higher for 9 of the 16 nonmanufacturing industries covered.

Prior to January 1938, the wording of the definition on the schedules for public utilities, wholesale and retail trade, hotels, and brokerage and insurance firms called for the inclusion of higher-salaried employees such as corporation officers, executives, and others whose duties are mainly supervisory. These employees have, for the most part, always been excluded from employment reports for other industries, and beginning with January it was requested that they be omitted also for the industries named above. For this reason, the average hours worked per week, average hourly earnings, and average weekly earnings for these industries are not comparable with the figures appearing in these reports dated earlier than January 1938.

Employment and pay-roll indexes and average weekly earnings in June 1938 for all manufacturing industries combined, for selected nonmanufacturing industries, and for class I railroads, with percentage changes over the month and year intervals except in the few industries for which data are not available, are presented in table 1.

Public Employment

During June more workers were employed on P. W. A. construction projects than in any month since November 1937. Of the 117,000 at work, 24,000 were engaged on Federal and non-Federal projects financed from National Industrial Recovery Act funds and 93,000 on projects financed from funds provided by the Emergency Relief Appropriation Acts of 1935, 1936, and 1937. Pay-roll disbursements totaled \$9,774,000 in June, \$569,000 higher than in the preceding month.

A marked seasonal expansion in road construction during the month accounted in large part for substantially increased employment on projects financed by regular Federal appropriations. Employment in June on these projects totaled 222,000—19,000 more than in May and 35,000 more than in June 1937. Gains in employment were registered on all types of projects with the exception of building construction, electrification, naval vessels, and water and sewerage projects. Total pay-roll disbursements in June amounted to \$21,363,000.

In June nearly 3,000 workers were employed on construction projects financed by the Reconstruction Finance Corporation, fewer than in any month since the Bureau first began collecting data on the program in April 1934. The June employment figure was virtually the same as for May. Pay-roll disbursements, on the other hand, were somewhat higher in June (\$493,000 compared with \$460,000 in May), because of the increase in the number of man-hours worked during the month.

Employment on projects operated by the Works Progress Administration continued to increase. The number at work in June amounted to 2,767,000, a gain of 88,000 from May and of 747,000 from June 1937. Pay rolls in June amounted to \$145,943,000, an increase of \$38,968,000 compared with June of last year. The upward trend in employment on Federal projects under The Works Program continued during the month, the 37,000 added to the pay rolls increasing the total number working to 288,000. Pay-roll disbursements on these projects amounted to \$15,163,000. Employment on work projects of the National Youth Administration increased sharply. Data on employment and pay rolls for Student Aid projects in June will not be available until next month.

In the regular services of the Federal Government increases in the number working were reported for the executive and legislative services and decreases were reported for the judicial and military services. Of the 858,000 employees in the executive service in June, 116,000 were working in the District of Columbia and 742,000 outside the District. Force-account employees (employees who are on the Federal pay roll and are engaged on construction projects) were 7 percent of the total number of employees in the executive service. The Post Office Department, the Department of Agriculture, and the Works Progress Administration were among the agencies reporting increases in employment, while the War and the Treasury Departments reported decreases.

TABLE 2.—Summary of Federal Employment and Pay Rolls, June 1938¹ (Preliminary Figures)

Class	Employment		Per-centage change	Pay rolls		Per-centage change
	June 1938	May 1938		June 1938	May 1938	
Federal services:						
Executive ²	857,520	³ 841,176	+1.9	\$128,071,062	³ \$124,983,174	+2.5
Judicial.....	2,083	2,143	-2.8	515,428	516,115	-.1
Legislative.....	5,251	5,220	+.6	1,211,535	1,206,474	+.4
Military.....	328,744	329,256	-.2	25,524,486	25,059,048	+1.9
Construction projects:						
Financed by P. W. A. ⁴	116,874	115,710	+1.0	9,773,522	9,204,258	+6.2
Financed by R. F. C. ⁵	2,984	3,032	-1.6	493,122	459,501	+7.3
Financed by regular Federal appropriations.....	222,096	202,845	+9.5	21,362,606	19,763,004	+8.1
Federal projects under The Works Program.....	288,010	251,115	+14.7	15,163,038	12,608,884	+20.3
Projects operated by W. P. A.....	2,767,125	2,678,702	+3.3	145,943,462	137,876,630	+5.9
National Youth Administration:						
Work projects.....	202,184	172,134	+17.5	3,437,290	2,967,134	+15.8
Student Aid.....	(⁶)	326,644		(⁶)	2,393,532	
Civilian Conservation Corps.....	293,850	306,141	-4.0	13,506,062	14,237,636	-5.1

¹ Includes data on projects financed wholly or partially from Federal funds.

² Includes force-account and supervisory and technical employees shown under other classifications to the extent of 103,114 employees and pay-roll disbursements of \$13,381,719 for June and 102,716 employees and pay-roll disbursements of \$12,803,923 for May.

³ Revised.

⁴ Data covering P. W. A. projects financed from E. R. A. A. 1935, 1936, and 1937 funds are included. These data are not shown under The Works Program. Includes 93,141 wage earners and \$7,630,319 pay roll for June; 91,206 wage earners and \$7,131,788 pay roll for May covering P. W. A. projects financed from E. R. A. A. 1935, 1936, and 1937 funds.

⁵ Includes 97 employees and pay-roll disbursements of \$8,345 for June and 80 employees and pay-roll disbursements of \$6,759 for May on projects financed by the RFC Mortgage Co.

⁶ Not available.

Employment in the Civilian Conservation Corps continued to decrease, dropping to the lowest point since September 1937. In June 294,000 workers were in camps, a decline of 12,000 compared with May and of 30,000 from June 1937. Of the total number in camps in June, 251,000 were enrollees, 5,000 reserve officers, 300 nurses, 1,500 educational advisers, and 36,000 supervisory and technical employees. Monthly pay-roll disbursements for all groups of workers amounted to \$13,506,000.

The number of workers on roads financed wholly from State or local funds increased 6,000 in June. Of the 180,000 working, 160,000 were engaged on maintenance projects and 20,000 on new road construction. Pay rolls for both types of road work amounted to \$12,060,000 in June, an increase of \$673,000 from May.



DETAILED REPORTS FOR MAY 1938

Industrial and Business Employment

A MONTHLY report on employment and pay rolls is published as a separate pamphlet by the Bureau of Labor Statistics. This gives detailed data regarding employment, pay rolls, working hours, and earnings for the current month for industrial and business establishments and for the various forms of public employment. This pamphlet is distributed free upon request. Its principal contents for the month of May, insofar as industrial and business employment is concerned, are reproduced in this section of the Monthly Labor Review.

Monthly data on employment and pay rolls are available for the following groups: 89 manufacturing industries; 16 nonmanufacturing industries, including private building construction; and class I steam railroads. The reports for the first two of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics, and in virtually all industries the samples are large enough to be entirely representative. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

EMPLOYMENT, PAY ROLLS, HOURS, AND EARNINGS

Indexes of employment and pay rolls as well as average hours worked per week, average hourly earnings, and average weekly earnings for March, April, and May 1938, are presented in table 1. The March and April figures may differ in some instances from those previously published because of revisions necessitated by the inclusion of late reports and other causes.

Per-
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change

+2.5
-1
+4
+1.9

+6.2
+7.3

+8.1

+20.3
+5.9

+15.8
-5.1

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TABLE 1.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, May, April, and March 1938*

MANUFACTURING

[Indexes are based on 3-year average 1923-25=100 and are adjusted to 1933 Census of Manufactures. Not comparable to indexes published in pamphlets prior to October 1936. Comparable series available upon request]

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	May 1938	April 1938	March 1938	May 1938	April 1938	March 1938	May 1938	April 1938	March 1938	May 1938	April 1938	March 1938	May 1938	April 1938	March 1938
All manufacturing industries.....	77.4	79.6	81.7	69.2	70.7	73.3	\$22.17	\$22.28	\$22.46	34.4	34.2	34.5	65.0	65.2	65.5
Durable goods.....	68.2	70.0	72.4	60.5	61.5	63.8	23.76	24.16	24.05	33.9	33.6	33.6	72.1	72.2	72.4
Nondurable goods.....	87.4	89.8	91.7	80.3	82.0	85.3	20.64	20.52	20.94	34.9	34.7	35.3	59.8	59.0	59.3
Durable goods															
Iron and steel and their products, not including machinery.....	75.5	76.9	78.9	60.9	61.2	62.1	22.75	22.44	22.11	30.9	29.8	29.6	76.3	76.2	75.9
Blast furnaces, steel works, and rolling mills.....	82.1	84.4	87.0	63.9	65.3	65.5	23.08	22.91	22.28	27.6	27.6	27.1	83.7	83.2	82.6
Bolts, nuts, washers, and rivets.....	61.4	60.8	61.7	55.7	51.3	52.7	20.56	19.11	19.34	29.2	27.3	27.3	70.5	70.5	70.7
Cast-iron pipe.....	57.1	57.2	55.6	40.6	40.6	39.0	19.47	19.03	18.80	33.1	32.5	31.9	58.1	57.6	57.9
Cutlery (not including silver and plated cutlery) and edge tools.....	71.8	74.9	75.3	58.2	60.0	63.1	20.28	20.04	20.96	33.9	33.4	35.2	62.1	61.6	61.6
Forgings, iron and steel.....	43.4	44.2	46.5	31.0	31.7	34.4	21.82	21.96	22.59	29.6	30.0	30.7	73.9	73.3	73.8
Hardware.....	59.8	61.1	66.4	53.9	52.4	57.1	20.37	19.42	19.47	31.4	30.0	29.9	64.9	64.6	65.1
Plumbers' supplies.....	79.7	78.7	78.4	58.7	54.0	52.3	23.28	21.66	21.06	34.7	32.1	31.3	67.0	67.5	67.1
Steam and hot-water heating apparatus and steam fittings.....	57.0	55.7	56.7	43.1	41.7	42.7	22.01	21.76	21.76	30.9	30.4	30.5	70.9	71.4	70.9
Stoves.....	76.5	75.3	76.5	61.5	59.3	60.5	23.61	23.09	23.21	35.7	35.0	35.2	66.6	66.2	66.2
Structural and ornamental metalwork.....	57.5	59.0	59.7	52.7	53.3	54.6	25.77	25.41	25.63	35.8	35.4	35.9	72.2	71.8	71.5
Tin cans and other tinware.....	88.7	88.1	87.0	93.6	90.9	92.2	23.36	22.82	23.42	37.9	36.9	37.8	61.9	62.3	62.4
Tools (not including edge tools, machine tools, files, and saws).....	74.9	76.7	70.3	68.5	69.9	76.2	21.25	21.18	22.36	34.0	34.1	36.0	61.8	61.8	61.8
Wirework.....	116.0	117.4	120.7	98.3	102.1	105.4	20.99	21.56	21.70	31.6	31.8	32.2	66.5	67.9	67.6
Machinery, not including transportation equipment.	89.6	88.2	86.8	81.3	84.2	88.7	24.96	24.94	25.34	34.1	34.0	34.5	72.9	73.0	73.0
Agricultural implements.....	129.5	136.5	136.9	162.5	168.6	178.3	27.98	27.50	28.99	37.2	36.8	38.8	73.4	74.9	74.9
Cash registers, adding machines, and calculating machines.....	124.4	126.0	126.5	116.4	115.0	124.1	28.16	27.49	29.54	34.8	34.0	36.8	81.2	80.9	80.7
Electrical machinery, apparatus, and supplies.....	78.0	81.6	86.4	69.1	72.7	78.1	24.27	24.42	24.73	32.3	32.6	32.9	74.9	74.6	74.9
Engines, turbines, tractors, and water wheels.....	108.5	119.3	121.3	101.6	115.0	118.7	28.35	29.54	30.04	34.8	35.8	36.3	81.6	82.7	82.9
Foundry and machine-shop products.....	79.2	81.7	85.2	70.1	71.5	75.2	24.74	24.72	24.72	34.7	34.4	34.7	71.3	71.2	71.2
Machine tools.....	116.4	122.1	127.7	96.8	101.3	112.3	25.54	25.51	27.01	34.9	35.0	37.0	73.0	72.9	73.1
Radios and phonographs.....	86.3	88.0	86.0	70.1	69.0	60.7	21.64	20.91	18.78	35.9	33.5	30.7	60.7	62.6	61.6
Textile machinery and parts.....	60.0	60.3	63.5	48.4	48.5	50.1	22.32	22.22	21.76	33.2	33.2	32.7	67.0	67.0	66.6
Typewriters and parts.....	112.9	111.4	112.8	76.1	78.4	80.6	19.19	19.27	19.58	29.5	29.5	29.6	64.9	65.1	66.0
Transportation equipment															
Aircraft.....	68.2	72.0	77.8	59.9	65.4	66.0	24.95	28.94	27.05	31.9	32.7	30.8	88.5	88.5	88.5
Automobiles.....	746.1	705.9	787.6	687.7	689.3	700.3	29.14	28.49	28.40	40.4	39.8	40.3	72.0	72.0	72.0
Trucks.....	68.7	73.1	70.8	68.7	68.7	68.7	24.95	28.94	27.05	31.9	32.7	30.8	88.5	88.5	88.5

TABLE 1.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, May, April, and March 1938—Con.*
 [Indexes are based on 3-year average 1923-25=100 and are adjusted to 1933 Census of Manufactures. Not comparable to indexes published in pamphlets prior to October 1936]
 [Comparable series available upon request]

Industry	Employment index			Pay-roll index			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	May 1938	April 1938	March 1938	May 1938	April 1938	March 1938	May 1938	April 1938	March 1938	May 1938	April 1938	March 1938	May 1938	April 1938	March 1938
<i>Nondurable goods—Continued</i>															
Leather and its manufactures.....	82.5	88.0	90.1	58.3	67.1	72.7	816.66	817.94	819.90	31.4	34.1	35.4	52.2	51.3	52.3
Boots and shoes.....	85.8	92.7	94.9	54.1	65.7	71.9	15.39	16.90	18.04	30.4	33.8	35.2	49.8	48.7	50.0
Leather.....	74.0	74.6	76.4	74.7	74.4	78.2	22.57	22.40	22.91	35.8	35.1	36.1	63.3	63.6	63.8
Food and kindred products.....	101.8	101.0	100.4	107.0	104.1	103.4	25.40	24.89	24.78	40.7	40.1	40.1	62.4	62.1	62.0
Baking.....	129.9	129.9	129.9	128.1	126.3	126.5	25.84	25.36	25.42	42.3	41.8	42.1	61.5	61.0	60.8
Beverages.....	204.3	198.4	194.3	233.1	223.0	217.3	33.30	32.87	32.63	39.7	39.1	38.9	84.4	84.8	84.5
Butter.....	87.5	85.0	81.5	73.5	68.4	66.1	23.44	22.31	22.27	48.4	47.2	46.2	48.5	47.7	48.5
Canning and preserving.....	82.9	80.5	75.7	85.4	80.4	74.5	17.05	16.53	16.32	34.5	34.6	34.5	50.5	49.4	48.9
Confectionery.....	66.9	71.6	74.6	63.6	66.0	72.7	17.13	16.79	17.76	33.6	35.1	37.1	48.5	47.9	47.8
Flour.....	71.5	71.8	73.2	71.3	70.9	72.3	26.00	25.76	25.67	43.6	42.8	42.9	59.1	59.7	58.9
Ice cream.....	78.4	69.9	63.4	74.0	66.8	60.9	28.43	29.06	29.20	47.6	46.9	46.3	59.6	61.7	61.7
Slaughtering and meat packing.....	83.3	83.0	84.3	94.6	92.0	92.0	28.38	27.73	27.26	41.2	40.1	39.4	68.8	69.1	69.3
Sugar, beet.....	38.6	38.7	34.0	46.7	45.6	42.4	28.62	27.74	29.36	39.0	40.1	41.3	76.5	72.9	74.4
Sugar refining, cane.....	76.4	66.9	68.4	73.1	65.0	60.2	24.67	25.05	22.66	39.9	39.7	36.7	61.9	60.9	61.9
Tobacco manufactures.....	52.4	59.1	59.3	52.5	49.3	50.7	16.31	15.54	15.79	35.3	33.0	34.2	46.2	46.6	46.0
Chewing and smoking tobacco and snuff.....	55.7	56.4	56.5	63.8	66.1	65.3	17.16	17.57	17.31	34.3	35.2	34.5	50.4	50.3	50.5
Cigars and cigarettes.....	59.8	59.3	59.6	51.1	47.3	48.9	16.13	15.10	15.47	35.3	32.7	34.1	45.8	46.1	45.4
Boxes, paper.....	98.5	97.7	100.3	93.8	94.6	96.8	27.41	27.30	27.71	37.0	36.9	37.5	76.9	76.5	76.4
Paper and pulp.....	89.0	89.8	90.8	87.5	87.2	89.4	20.33	20.10	20.37	36.9	36.8	37.5	55.5	55.0	54.7
Printing and publishing.....	105.4	106.9	108.1	98.7	99.9	103.4	23.20	23.16	23.73	37.3	37.4	38.2	62.3	62.0	62.2
Book and job.....	90.2	91.7	92.8	83.7	84.8	87.6	29.40	29.27	28.93	37.3	37.1	37.8	79.9	79.9	80.3
Newspapers and periodicals.....	103.1	103.9	103.4	101.4	102.0	101.8	36.92	36.88	36.90	36.3	36.4	36.7	98.4	97.3	96.8
Chemicals and allied products, and petroleum refining.....	107.2	110.5	113.2	117.7	116.3	119.4	28.50	27.32	27.43	37.7	37.0	37.5	75.7	74.2	73.7
Other than petroleum refining.....	104.8	108.7	112.1	111.3	110.9	114.5	25.17	24.17	24.26	37.9	37.5	37.9	67.2	65.9	65.3
Chemicals.....	107.6	109.4	111.4	115.9	116.6	117.6	29.63	29.54	29.23	37.6	37.2	37.0	78.9	79.5	79.0
Cottonseed—oil, cake, and meal.....	57.3	74.9	87.5	51.2	64.9	78.5	12.95	12.23	12.80	49.0	48.6	50.1	25.4	25.6	25.6
Druggists' preparations.....	104.0	104.3	104.7	114.6	114.8	115.3	23.89	23.89	24.01	37.6	37.7	38.0	59.8	60.0	59.9
Explosives.....	84.8	86.0	87.2	85.9	86.5	90.9	28.55	28.32	29.13	34.9	34.9	36.2	81.7	81.1	80.5
Fertilizers.....	90.4	123.0	116.7	95.7	121.1	110.7	17.46	16.36	15.70	39.0	40.7	41.3	44.9	40.3	38.2
Paints and varnishes.....	118.7	118.0	117.3	122.2	116.7	113.3	28.17	27.11	26.70	40.7	39.4	38.3	69.3	68.9	69.7
Rayon and allied products.....	304.0	303.1	354.3	275.0	260.3	300.4	22.34	21.21	22.19	34.6	32.6	34.3	64.6	65.0	64.7
Soap.....	91.7	92.8	96.0	107.2	108.5	111.8	28.84	28.54	28.65	38.7	38.5	39.0	74.7	75.1	74.4
Petroleum refining.....	117.4	117.8	117.7	138.4	133.8	135.4	35.78	34.47	34.89	37.0	35.8	36.2	97.5	96.8	97.0
Rubber products.....	71.5	72.7	73.9	63.1	61.7	60.6	23.39	23.47	23.08	31.1	30.1	29.6	76.9	76.9	76.9
Rubber boots and shoes.....	52.4	53.9	54.7	39.7	38.1	40.3	18.98	17.72	18.02	31.1	30.1	29.6	76.9	76.9	76.9
Rubber goods, other than boots, shoes, tires and inner tubes.....	71.5	72.7	73.9	63.1	61.7	60.6	23.39	23.47	23.08	31.1	30.1	29.6	76.9	76.9	76.9

NONMANUFACTURING

[Indexes are based on 12-month average 1929=100]

	71.5	72.7	72.9	63.1	61.7	60.9	23.39	22.47	22.08	31.1	30.1	29.6	76.9	76.7	77.1
Rubber products.....	304.0	303.1	334.3	275.0	260.3	300.4	22.34	21.21	22.19	34.0	32.6	34.3	94.0	93.0	94.0
Rayon and allied products.....	91.7	93.8	96.0	107.2	108.5	111.8	28.84	28.54	28.65	38.5	38.5	39.0	74.7	73.1	74.4
Soap.....	117.4	117.7	117.7	138.4	133.8	135.4	35.78	34.47	34.89	37.0	35.8	36.2	97.3	96.8	97.0
Petroleum refining.....															
Rubber boots and shoes.....	52.4	53.9	54.7	59.7	58.1	60.9	18.98	17.72	18.47	31.4	29.3	30.6	60.5	60.5	60.3
Rubber goods, other than boots, shoes, tires, and inner tubes.....	106.6	108.9	107.9	96.8	98.6	98.3	20.62	20.70	20.88	35.1	35.0	34.8	59.1	59.3	59.6
Rubber tires and inner tubes.....	62.3	63.0	63.5	57.0	54.6	52.4	26.67	25.21	24.06	27.9	26.6	25.3	95.0	94.6	95.1
Coal mining:															
Anthracite ¹	52.8	57.0	59.3	38.3	39.0	47.3	\$23.61	\$22.25	\$28.01	25.1	23.5	28.0	92.3	92.7	92.2
Bituminous ¹	82.0	85.8	93.2	55.5	56.3	68.4	18.09	17.39	19.43	20.0	19.8	22.2	88.8	86.8	86.8
Metallic mining.....	58.8	61.6	62.3	53.3	53.3	56.3	27.01	27.01	28.18	40.1	40.0	41.6	67.8	67.6	67.9
Quarrying and nonmetallic mining.....	43.6	41.7	38.9	38.2	33.9	30.2	22.11	20.55	19.74	40.9	37.8	36.6	54.0	54.2	53.8
Crude-petroleum producing.....	73.2	73.8	73.6	66.8	68.0	68.0	33.48	34.28	34.32	39.4	39.9	40.2	85.2	84.3	84.0
Public utilities:															
Telephone and telegraph ¹	75.0	74.8	74.9	91.3	91.6	92.6	31.14	31.30	31.61	38.4	39.4	39.1	85.6	84.2	85.3
Electric light and power and manufactured gas.....	91.6	91.8	92.0	97.3	97.6	98.6	33.49	33.34	33.67	39.2	40.1	40.3	85.4	83.4	83.7
Electric-railroad and motorbus operation and maintenance ¹	70.6	71.1	70.8	71.2	70.0	69.9	32.96	32.21	32.28	45.9	45.1	45.3	70.7	70.4	70.4
Trade:															
Wholesale ¹	87.3	88.5	89.1	75.1	74.6	74.7	30.35	29.59	29.09	42.8	42.6	42.4	71.2	69.8	68.3
Retail ¹	83.7	88.2	83.0	70.0	72.2	68.6	21.76	21.09	21.46	42.7	42.6	42.8	54.6	54.5	54.5
General merchandising ¹	91.9	101.0	90.5	84.2	89.4	82.2	18.56	17.96	18.11	39.2	39.5	39.1	48.7	47.6	48.7
Other than general merchandising ¹	81.5	84.9	81.0	67.0	68.6	65.8	24.22	23.98	24.13	43.7	43.6	43.8	56.4	56.6	56.2
Hotels (year-round) ¹	93.7	93.5	93.4	80.6	80.5	80.9	14.78	14.87	14.97	46.7	46.9	47.3	31.4	31.6	31.2
Laundries ¹	96.2	95.4	94.8	80.9	80.6	78.6	17.17	17.20	16.92	42.0	42.1	41.8	41.3	41.1	40.6
Dyeing and cleaning ¹	110.0	111.8	98.5	80.8	87.2	68.2	20.40	21.58	19.24	42.1	44.1	40.8	48.5	49.1	47.8
Brokers ¹	-2.0	-2.0	-2.7	-4.0	-3.4	-4.0	33.75	34.47	35.15	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Insurance ¹	+1.2	+1.2	+1.2	-1.2	-1.3	-1.3	35.79	36.75	36.12	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Building construction ¹	+3.4	+5.5	-1.9	+5.8	+7.3	+2	29.07	28.66	28.44	32.3	31.4	30.7	90.3	90.9	92.1

¹ A average weekly earnings are computed from figures furnished by all reporting establishments. A average hours and average hourly earnings are computed from data supplied by a small number of establishments as all reporting firms do not furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample.

² Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of this publication.

³ A average weekly earnings, hourly earnings, and hours not strictly comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁴ Not available.

⁵ Cash payments only; the additional value of board, room, and tips cannot be computed.

⁶ Indexes of employment and pay rolls not available; percentage changes from preceding month substituted.

Average weekly earnings shown in table 1 are computed by dividing the total weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As all reporting establishments do not supply man-hour data, average hours worked per week and average hourly earnings are necessarily based on data supplied by a smaller number of reporting firms. The size and composition of the reporting sample varies slightly from month to month and therefore the average hours per week, average hourly earnings, and average weekly earnings shown in table 1 are not strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movements of earnings and hours over the period shown. The changes from the preceding month, expressed as percents, are based on identical lists of firms for the 2 months.

INDEXES OF EMPLOYMENT AND PAY ROLLS

Indexes of employment and pay rolls are given in tables 2 and 3 for all manufacturing industries combined, for the durable and non-durable goods groups of manufacturing industries, and for 13 non-manufacturing industries, including 2 subgroups under retail trade, by months, from January 1937 to May 1938, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to May 1938.

The indexes of factory employment and pay rolls are computed from returns supplied by representative establishments in 89 manufacturing industries and cover wage earners only. The base used in computing these indexes is the 3-year average 1923-25 as 100. In May 1938 reports were received from 25,947 manufacturing establishments employing 3,827,547 workers, whose weekly earnings were \$84,840,451. The employment reports received from these establishments cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 89 industries included in the monthly survey of the Bureau of Labor Statistics.

The indexes for the nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries, dyeing and cleaning, and building construction cover wage earners only, but the figures for public utilities, trade, hotels, brokerage, and insurance relate to all employees, except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum producing they cover wage earners and clerical field force.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the pay period ending nearest the 15th of the month.

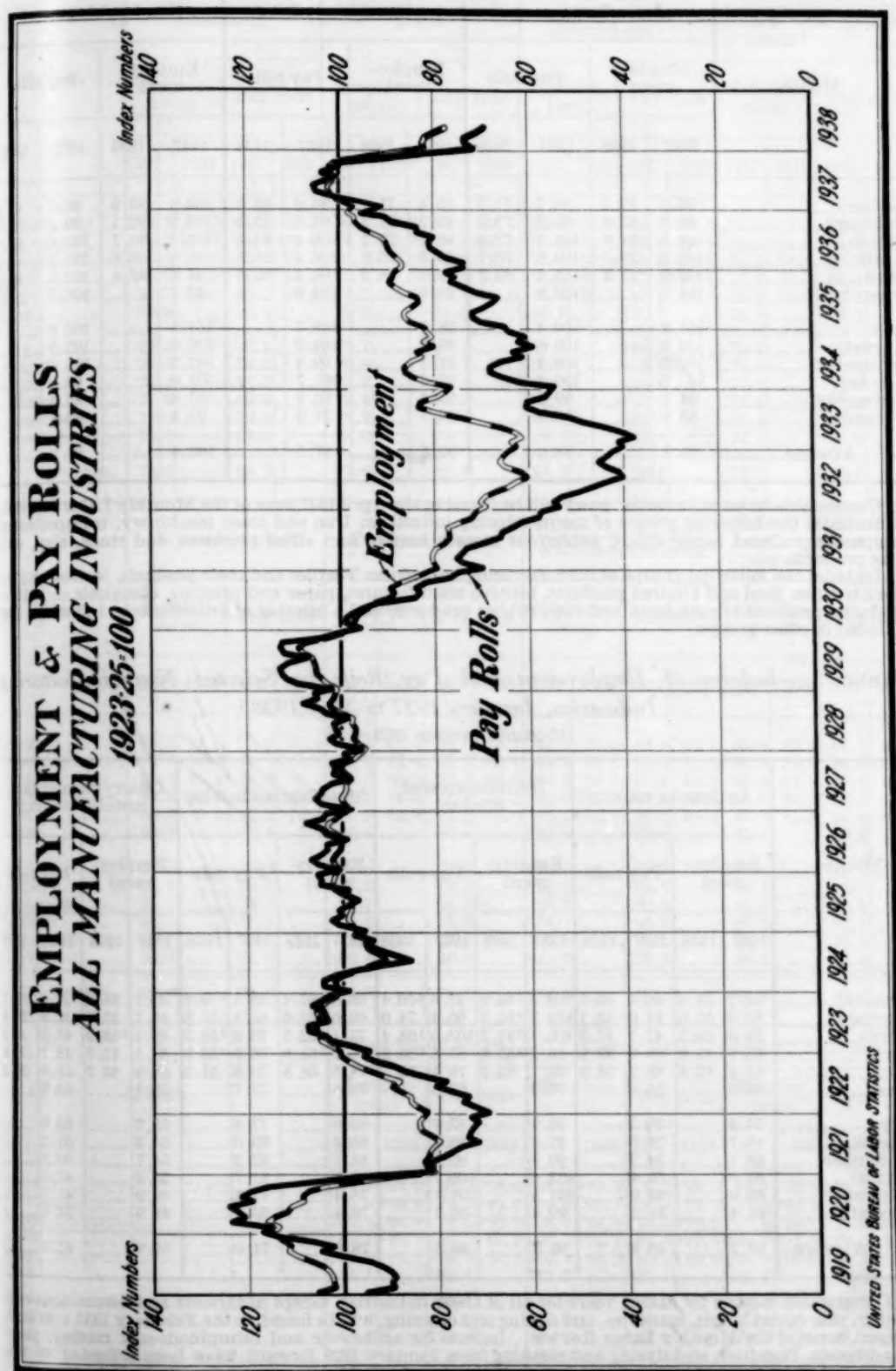


TABLE 2.—*Indexes of Employment and Pay Rolls in All Manufacturing Industries Combined and in the Durable and Nondurable Goods Groups*¹

[Adjusted to 1933 Census of Manufactures—3-year average 1923-25=100]

Month	Total				Durable goods ²				Nondurable goods ³			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938
January.....	96.5	82.2	90.7	71.7	90.4	75.1	86.6	63.9	103.0	89.9	96.0	81.6
February.....	99.0	82.3	95.8	73.2	93.2	73.3	92.5	63.7	105.2	92.1	99.9	85.1
March.....	101.1	81.7	101.1	73.3	96.4	72.4	100.0	63.8	106.1	91.7	102.6	85.3
April.....	102.1	79.6	104.9	70.7	98.6	70.0	106.4	61.8	105.9	89.8	102.9	82.0
May.....	102.3	77.4	105.2	69.2	99.9	68.2	107.5	60.5	104.8	87.4	102.3	80.3
June.....	101.1	-----	102.9	-----	98.8	-----	104.6	-----	103.5	-----	100.8	-----
July.....	101.4	-----	100.4	-----	98.9	-----	100.7	-----	104.1	-----	100.0	-----
August.....	102.3	-----	103.8	-----	98.1	-----	104.0	-----	106.9	-----	103.5	-----
September.....	102.1	-----	100.1	-----	97.3	-----	99.4	-----	107.3	-----	100.9	-----
October.....	100.5	-----	100.1	-----	97.6	-----	101.7	-----	103.6	-----	98.2	-----
November.....	94.7	-----	89.5	-----	92.4	-----	89.9	-----	97.3	-----	89.0	-----
December.....	88.6	-----	80.9	-----	84.3	-----	77.0	-----	93.3	-----	85.8	-----
Average.....	99.3	-----	98.0	-----	95.5	-----	97.5	-----	103.4	-----	98.5	-----

¹ Comparable indexes for earlier years will be found in the April 1937 issue of the Monthly Labor Review.² Includes the following groups of manufacturing industries: Iron and steel; machinery; transportation equipment; railroad repair shops; nonferrous metals; lumber and allied products; and stone, clay, and glass products.³ Includes the following groups of manufacturing industries: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.TABLE 3.—*Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1937 to May 1938*¹

[12-month average 1929=100]

Month	Anthracite mining				Bituminous-coal mining				Metalliferous mining				Quarrying and non-metallic mining			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938
January.....	65.2	59.6	46.4	46.5	104.5	96.9	93.6	70.4	66.8	67.4	58.4	59.1	45.7	38.2	34.6	27.7
February.....	63.6	60.0	44.6	46.1	104.7	95.5	96.4	74.0	69.6	63.6	63.4	55.8	46.7	37.8	37.8	28.6
March.....	59.0	59.3	41.1	47.3	106.1	93.2	103.5	68.4	73.1	62.3	70.6	56.3	49.1	38.9	41.3	30.2
April.....	65.1	57.0	69.4	39.0	89.7	85.8	63.6	56.3	76.2	61.6	76.9	53.3	53.1	41.7	48.1	33.9
May.....	61.5	52.8	48.2	38.3	95.1	82.2	79.4	55.5	78.5	58.8	79.8	51.2	54.9	43.7	51.4	38.3
June.....	61.6	-----	55.3	-----	96.2	-----	83.3	-----	79.5	-----	77.7	-----	55.4	-----	52.6	-----
July.....	54.3	-----	38.2	-----	93.7	-----	77.7	-----	82.0	-----	77.8	-----	55.5	-----	50.8	-----
August.....	49.7	-----	29.6	-----	97.4	-----	86.3	-----	83.4	-----	83.0	-----	54.9	-----	53.2	-----
September.....	58.1	-----	34.2	-----	99.4	-----	90.9	-----	84.1	-----	82.2	-----	54.7	-----	50.1	-----
October.....	61.5	-----	55.4	-----	102.4	-----	100.7	-----	82.9	-----	81.7	-----	53.3	-----	49.3	-----
November.....	60.9	-----	49.0	-----	101.4	-----	91.1	-----	75.4	-----	71.6	-----	49.9	-----	41.7	-----
December.....	61.4	-----	51.3	-----	99.4	-----	95.1	-----	70.4	-----	65.1	-----	43.9	-----	33.4	-----
Average.....	60.2	-----	46.9	-----	99.3	-----	88.5	-----	76.8	-----	74.0	-----	51.4	-----	45.4	-----

¹ Comparable indexes for earlier years for all of these industries, except anthracite and bituminous-coal mining, year-round hotels, laundries, and dyeing and cleaning, will be found in the February 1935 and subsequent issues of the Monthly Labor Review. Indexes for anthracite and bituminous-coal mining, year-round hotels, laundries, and dyeing and cleaning from January 1929 forward have been adjusted to the 1935 census and are presented in the January 1938 issue of "Employment and Pay Rolls."² Revised.

TABLE 3.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1937 to May 1938—Continued

Month	Crude-petroleum producing				Telephone and telegraph				Electric light and power, and manufactured gas				Electric-railroad and motorbus operation and maintenance ²			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938
January	72.7	75.3	61.2	68.2	74.4	77.8	83.6	93.7	92.1	93.8	92.3	98.9	72.5	72.3	68.0	70.6
February	73.5	74.2	64.1	69.6	74.8	75.7	82.2	89.9	92.2	92.6	93.6	98.5	72.5	71.2	68.7	70.2
March	74.2	73.6	63.9	68.0	75.4	74.9	87.2	92.6	92.4	92.0	94.8	98.6	72.6	70.8	69.2	69.9
April	75.8	73.8	67.7	68.0	76.6	74.8	86.3	91.6	93.1	91.8	95.5	97.6	72.9	71.1	69.4	70.0
May	76.7	73.2	68.2	66.8	77.7	75.0	89.5	91.3	94.6	91.7	97.9	97.4	73.3	70.6	70.1	71.2
June	78.5	---	70.4	---	78.5	---	88.6	---	96.3	---	100.4	---	73.3	---	71.1	---
July	78.5	---	70.5	---	79.7	---	92.1	---	97.5	---	102.2	---	73.4	---	70.8	---
August	79.3	---	70.8	---	79.8	---	92.1	---	98.3	---	102.6	---	73.4	---	73.1	---
September	78.2	---	71.2	---	79.8	---	92.3	---	98.6	---	104.0	---	73.7	---	71.6	---
October	77.5	---	69.9	---	79.6	---	94.9	---	98.5	---	105.3	---	73.4	---	71.4	---
November	77.2	---	70.2	---	78.9	---	91.4	---	97.3	---	103.8	---	73.2	---	71.8	---
December	76.5	---	69.8	---	78.0	---	94.7	---	96.1	---	102.4	---	72.8	---	71.9	---
Average	76.5	---	68.2	---	77.8	---	89.6	---	95.6	---	99.6	---	73.1	---	70.6	---

Month	Wholesale trade				Total retail trade				Retail trade—general merchandising				Retail trade—other than general merchandising			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938
January	90.7	91.0	72.6	75.4	85.4	84.1	68.0	70.1	95.1	91.5	83.8	84.6	82.9	82.1	64.7	67.1
February	92.0	90.4	74.1	75.3	85.2	82.4	67.9	68.4	93.9	88.8	82.9	81.5	82.9	80.7	64.8	65.7
March	92.1	89.1	75.0	74.7	88.5	83.0	70.5	68.6	100.3	90.5	87.6	82.2	85.4	81.0	67.0	65.8
April	91.9	88.5	75.4	74.6	88.8	88.2	71.9	72.2	99.6	101.0	89.1	89.4	86.0	84.9	68.3	68.6
May	90.8	87.3	76.1	75.1	89.9	83.8	73.5	70.0	102.1	92.4	91.5	84.4	86.7	81.5	69.8	67.0
June	90.3	---	76.3	---	90.5	---	74.4	---	102.9	---	92.5	---	87.2	---	70.6	---
July	90.6	---	76.9	---	87.6	---	72.8	---	95.9	---	87.3	---	85.4	---	69.8	---
August	91.8	---	79.0	---	86.2	---	72.3	---	93.8	---	85.7	---	84.2	---	69.5	---
September	93.0	---	78.3	---	90.7	---	74.4	---	103.7	---	92.4	---	87.3	---	70.7	---
October	94.0	---	79.3	---	92.1	---	75.9	---	108.1	---	96.2	---	87.9	---	71.7	---
November	93.5	---	78.3	---	91.7	---	75.3	---	109.8	---	97.1	---	86.9	---	70.8	---
December	93.3	---	77.8	---	100.4	---	80.6	---	145.9	---	123.3	---	88.5	---	71.8	---
Average	92.0	---	76.6	---	89.8	---	73.1	---	104.3	---	92.5	---	85.9	---	69.1	---

Month	Year-round hotels				Laundries				Dyeing and cleaning			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938
January	92.9	94.3	76.2	81.6	98.3	96.8	78.2	80.1	98.8	96.8	64.7	65.5
February	93.9	94.5	78.5	83.6	98.4	95.7	78.1	79.1	98.0	95.6	63.6	65.2
March	94.4	93.4	78.7	80.9	98.5	94.8	79.3	78.6	104.3	98.5	71.8	68.2
April	96.1	93.5	80.7	80.5	98.3	95.4	80.4	80.6	109.2	111.8	80.1	87.2
May	95.3	93.7	79.7	80.5	100.3	96.2	83.3	80.9	113.9	109.9	86.1	80.7
June	94.4	---	80.1	---	103.9	---	87.5	---	118.5	---	92.2	---
July	93.6	---	79.4	---	105.8	---	89.0	---	111.0	---	79.5	---
August	94.3	---	80.5	---	104.7	---	88.0	---	110.3	---	81.3	---
September	95.7	---	82.4	---	104.1	---	86.4	---	112.8	---	85.7	---
October	96.9	---	84.1	---	99.9	---	83.4	---	110.5	---	83.6	---
November	96.6	---	84.3	---	97.8	---	81.1	---	103.5	---	73.7	---
December	94.9	---	82.6	---	97.0	---	81.1	---	99.2	---	68.6	---
Average	94.9	---	80.6	---	100.6	---	83.0	---	107.5	---	77.6	---

² Revised.³ Not including electric-railroad car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 1.

TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

A comparison of employment and pay rolls, by States and geographic divisions, in April and May 1938, is shown in table 4 for all groups combined, and for all manufacturing industries combined based on data supplied by reporting establishments. The percentage changes shown, unless otherwise noted, are unweighted—that is, the industries included in the manufacturing group and in the grand total have not been weighted according to their relative importance.

The totals for all manufacturing industries combined include figures for miscellaneous manufacturing industries in addition to the 89 manufacturing industries presented in table 1. The totals for all groups combined include all manufacturing industries, each of the nonmanufacturing industries presented in table 1 (except building construction), and seasonal hotels.

TABLE 4.—Comparison of Employment and Pay Rolls in Identical Establishments in April-May 1938, by Geographic Divisions and by States

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll May 1938	Percentage change from April 1938	Amount of pay roll (1 week) May 1938	Percentage change from April 1938	Number of establishments	Number on pay roll May 1938	Percentage change from April 1938	Amount of pay roll (1 week) May 1938	Percentage change from April 1938
				<i>Dollars</i>					<i>Dollars</i>	
New England	13, 758	787, 756	-0.6	17, 111, 333	-(¹)	3, 660	526, 312	-0.6	10, 566, 391	-0.3
Maine.....	814	51, 754	+5.9	1, 009, 352	+4.9	298	41, 372	+7.4	764, 525	+6.1
New Hampshire.....	633	37, 048	-1.7	739, 865	-4.3	204	29, 973	-2.1	573, 322	-5.9
Vermont.....	474	15, 120	+3.3	322, 146	+2.0	156	8, 732	+3.3	176, 584	+6
Massachusetts.....	² 8, 148	<i>426, 217</i>	-1.4	<i>9, 673, 652</i>	-3.9	1, 808	<i>239, 089</i>	-2.0	<i>4, 964, 583</i>	-2.3
Rhode Island.....	1, 235	78, 522	+6	1, 551, 662	-1.6	426	59, 942	+1.8	1, 092, 567	-1.1
Connecticut.....	2, 454	179, 095	-1.1	3, 814, 656	+2.4	768	147, 204	-1.3	2, 994, 810	+3.1
Middle Atlantic	32, 668	1, 934, 542	-3.6	49, 178, 364	-2.6	5, 278	1, 017, 656	-3.0	24, 396, 337	-2.6
New York.....	20, 824	885, 469	-3.9	24, 165, 459	-3.8	³ 2, 350	<i>382, 915</i>	-3.6	<i>9, 784, 769</i>	-4.7
New Jersey.....	4, 358	317, 863	-1.4	7, 977, 519	.1	⁴ 839	<i>225, 999</i>	-1.0	<i>5, 606, 978</i>	+8
Pennsylvania.....	7, 486	731, 210	-4.3	17, 035, 386	-2.1	2, 089	<i>408, 742</i>	-3.3	<i>9, 004, 590</i>	-1.4
East North Central	25, 515	1, 878, 779	-3.0	46, 417, 547	-2.8	8, 688	1, 355, 243	-3.2	33, 283, 220	-3.7
Ohio.....	7, 439	508, 862	-3.6	12, 037, 028	-1.9	2, 563	365, 668	-3.2	8, 590, 137	-1.5
Indiana.....	<i>2, 986</i>	<i>230, 035</i>	-1.7	<i>5, 260, 586</i>	-2.2	1, 077	<i>178, 362</i>	-1.0	<i>4, 115, 103</i>	+5
Illinois.....	⁶ 6, 758	<i>545, 979</i>	-3.2	<i>13, 856, 025</i>	-2.9	2, 491	<i>361, 970</i>	-3.5	<i>8, 908, 451</i>	-4.1
Michigan.....	3, 951	369, 032	-3.5	9, 900, 004	-5.5	1, 005	<i>295, 092</i>	-4.5	<i>8, 003, 053</i>	-7.4
Wisconsin.....	⁷ 4, 401	<i>224, 871</i>	-1.7	<i>5, 363, 904</i>	-2.4	⁸ 1, 552	<i>154, 151</i>	-1.9	<i>3, 668, 476</i>	-2.8
West North Central	11, 915	405, 383	-2.2	9, 623, 135	-1.1	2, 667	202, 387	-3.3	4, 781, 269	-3.6
Minnesota.....	2, 338	90, 115	-2.1	2, 297, 767	+1.1	642	45, 050	-2.4	1, 182, 776	-1.1
Iowa.....	1, 868	58, 903	-4.1	1, 367, 195	-4.2	427	31, 825	-7.1	757, 182	-7.8
Missouri.....	2, 972	160, 480	-3.0	3, 689, 311	-3.1	878	87, 763	-4.1	1, 860, 187	-6.6
North Dakota.....	512	4, 462	+1.5	111, 935	+5.8	55	665	+7.8	18, 695	+8.5
South Dakota.....	451	7, 598	+9	196, 523	+3.4	40	2, 238	+2.7	55, 881	+7.6
Nebraska.....	1, 409	29, 832	+7	680, 818	+2.8	161	9, 974	+2.4	249, 973	+2.4
Kansas.....	⁹ 2, 365	<i>55, 993</i>	+3.3	<i>1, 279, 586</i>	+3.5	464	<i>24, 872</i>	+1.1	<i>656, 575</i>	+3.0

¹ Less than 1/10 of 1 percent.

² Includes banks and trust companies, construction, municipal, agricultural, and office employment, amusement and recreation, professional services, and trucking and handling.

³ Includes laundering and cleaning, and water, light, and power.

⁴ Includes laundries.

⁵ Weighted percentage change.

⁶ Includes automobile and miscellaneous services, restaurants, and building and contracting.

⁷ Includes construction, but not public works.

⁸ Does not include logging.

⁹ Includes financial institutions, miscellaneous services, and restaurants.

¹⁰ Weighted percentage change includes hired farm labor.

TABLE 4.—Comparison of Employment and Pay Rolls in Identical Establishments in April-May 1938, by Geographic Divisions and by States—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll May 1938	Percentage change from April 1938	Amount of pay roll (1 week) May 1938	Percentage change from April 1938	Number of establishments	Number on pay roll May 1938	Percentage change from April 1938	Amount of pay roll (1 week) May 1938	Percentage change from April 1938
				<i>Dollars</i>					<i>Dollars</i>	
South Atlantic.....	11,300	786,851	-3.8	14,435,439	-2.0	2,979	518,773	-3.8	8,706,908	-2.4
Delaware.....	216	13,425	-1.0	317,414	+1.3	84	9,600	+1.3	217,645	+2.4
Maryland.....	1,629	127,222	-1.8	2,882,656	-1.1	626	86,876	-1.9	1,887,326	-2.5
District of Columbia.....	1,079	39,264	-8	1,020,217	+4	40	3,339	-2	111,869	-2
Virginia.....	2,128	109,751	-2.5	2,019,489	-9	468	73,410	-3.1	1,313,525	-1.6
West Virginia.....	1,246	130,273	-1.8	2,742,246	+4	266	48,345	-2.2	1,098,344	+1.2
North Carolina.....	1,611	153,448	-4.5	2,216,397	-4.4	680	139,123	-4.1	1,966,665	-4.6
South Carolina.....	749	62,258	-11.2	861,967	-7.1	207	54,654	-12.1	718,560	-8.3
Georgia.....	1,475	106,347	-1.8	1,562,172	-9	397	81,630	-1.6	1,042,797	-1.7
Florida.....	1,167	44,863	-11.9	812,881	-8.5	211	21,796	-6.0	350,177	-4.6
East South Central.....	4,678	289,850	-2.2	4,706,158	+4	1,087	161,017	-1.9	2,659,417	-1.2
Kentucky.....	1,414	74,418	-2.2	1,462,617	+5.2	301	29,480	-2.4	585,731	+1.1
Tennessee.....	1,369	95,665	-9	1,608,853	-4	385	67,649	-8	1,096,044	-7
Alabama.....	1,307	82,140	-2.4	1,363,042	-2.5	300	53,059	-1.3	830,553	-1.8
Mississippi.....	588	17,627	-8.5	271,646	-5.2	101	10,829	-9.9	147,089	-9.6
West South Central.....	6,107	227,899	-1.6	5,268,805	+7	1,372	106,700	-1.1	2,388,174	+2.2
Arkansas.....	11 1,072	28,895	-2.9	492,831	-3.4	301	17,435	-2.9	277,304	-5.2
Louisiana.....	1,094	54,068	-1.4	1,089,074	+9	263	30,504	-5	573,846	+2.0
Oklahoma.....	1,420	41,327	-1.7	1,036,875	+1.2	149	11,328	-9	282,454	+5.8
Texas.....	2,521	103,609	-1.2	2,650,025	+1.4	659	47,433	-9	1,254,670	+3.3
Mountain.....	4,265	118,326	-3.2	3,014,378	-8	605	32,876	-8	841,964	+2.2
Montana.....	671	16,069	-4.4	470,659	-2.4	90	4,488	-7	119,560	+1.9
Idaho.....	466	9,716	+8	255,445	+4.1	61	2,804	+4.7	71,210	+11.7
Wyoming.....	317	8,517	-1.3	227,548	+2.3	41	1,586	-1.0	55,543	+5.3
Colorado.....	1,263	40,642	-4.2	973,664	-3.0	193	12,780	-1.9	317,845	-3
New Mexico.....	291	6,384	-4.2	133,065	-5	32	896	-9.7	16,845	-9.0
Arizona.....	452	13,924	-3.9	378,211	+1.1	43	2,851	-1.0	72,249	+5.2
Utah.....	610	19,873	-2.5	480,695	-1.2	127	6,671	+9	165,493	+2.0
Nevada.....	195	3,201	+9	95,091	+5.0	18	800	-2.3	23,219	-3.2
Pacific.....	10,226	429,915	+1	12,199,027	+1.6	2,594	221,970	+7	6,029,158	+1.8
Washington.....	2,962	88,570	-8	2,296,629	-1.0	581	47,762	-4	1,188,241	-1.6
Oregon.....	1,380	46,692	+9	1,221,163	+3.1	311	26,956	+2.0	679,176	+4.9
California.....	13 5,884	294,663	+2	8,671,235	+2.1	1,702	147,252	+8	4,161,741	+2.2

¹¹ Includes automobile dealers and garages, and sand, gravel, and building stone.¹² Includes banks, insurance, and office employment.

INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in April and May 1938 is made in table 5 for 13 metropolitan areas which had a population of 500,000 or over in 1930. Cities within these areas, but having a population of 100,000 or over, are not included, as data concerning them are tabulated separately and are available on request.

Footnotes to the table indicate which cities are excluded. The figures represent reports from cooperating establishments and cover both full- and part-time workers in the manufacturing and nonmanufacturing industries presented in table 1 with the exception of building construction, and include also miscellaneous industries.

TABLE 5.—*Comparison of Employment and Pay Rolls in Identical Establishments in April and May 1938, by Principal Metropolitan Areas*

Metropolitan area	Number of establishments	Number on pay roll, May	Percentage change from April	Amount of pay roll (1 week), May	Percentage change from April
New York ¹	15,010	591,893	-4.1	\$15,627,545	-3.9
Chicago ²	4,528	420,210	-2.6	11,403,106	-1.8
Philadelphia ³	2,019	182,009	-5.8	4,780,536	-3.8
Detroit	1,738	225,985	-4.7	6,509,071	-7.6
Los Angeles ⁴	3,055	150,148	-7	4,400,705	+2.4
Cleveland	1,743	113,821	-4.8	2,856,791	-2.8
St. Louis	1,555	119,098	-2.9	2,806,405	-3.3
Baltimore	1,180	97,673	-1.9	2,195,853	-2.5
Boston ⁵	1,500	99,763	-2.5	2,089,982	-1.8
Pittsburgh	1,102	161,794	-3.1	3,923,127	-4
San Francisco ⁶	1,716	82,159	+1.8	2,455,572	+1.9
Buffalo	882	56,367	-2.9	1,464,007	-2.5
Milwaukee	1,151	93,335	-3.5	2,374,834	-4.5

¹ Does not include Elizabeth, Jersey City, Newark, or Paterson, N. J.; nor Yonkers, N. Y.

² Does not include Gary, Ind.

³ Does not include Camden, N. J.

⁴ Does not include Long Beach, Calif.

⁵ Figures relate to city of Boston only.

⁶ Does not include Oakland, Calif.

UNEMPLOYMENT IN FOREIGN COUNTRIES IN SPRING OF 1938

NOTWITHSTANDING that most foreign countries experienced some reduction in unemployment during the spring of 1938, in accordance with the usual seasonal trend, the volume of unemployment in most cases remained above that of identical months in the second quarter of 1937. This situation is reflected in statistics covering trade-union experience, unemployed registered with public exchanges, and compulsorily insured workers.

In Belgium, Denmark, Norway, and Sweden the early spring returns showed a higher rate of unemployment than in 1937. More recent statistics for France, Great Britain, and the Irish Free State indicate that the same trend continued in later months. For example, wholly unemployed trade-unionists in Belgium represented 14.2 percent of the total in March 1938 as compared with 12.4 percent in March 1937. In France there were 362,899 unemployed in receipt of benefit at the end of June as compared with 321,725 in June 1937. The statistics for Great Britain show not only that registration was higher in every month of 1938 through June than in 1937 but that the total for June 1938, 1,802,912, was above the previous month, 1,778,805, representing a contraseasonal movement.

Australia, Canada, the Netherlands, Germany, and Poland appear to be in a more favorable position, as measured by the unemployment returns. First-quarter statistics for Australia showed 8.0 percent of trade-unionists out of work as compared with 9.9 percent at the same

time in 1937. In Germany and Poland registration with employment exchanges at the end of May 1938 was well below the level of May 1937. In both countries there was a considerable decline in unemployment from April to May 1938. The downward trend continued in June, according to German statistics received.

The table following gives statistics of unemployment in foreign countries as officially reported, by years from 1932 to 1937, and by months beginning with May 1937 and including the latest month for which figures are available. Beyond comparisons of the figures in a single series for different periods, it is not possible to use the official unemployment statistics to measure volume of unemployment in a single country or to compare conditions in one country with those in another, owing to the fact that the coverage is not always complete. For example, only insured persons may be reported in some instances, or certain classes, such as agricultural labor, may be excluded.

Statement of Unemployment in Foreign Countries

Year and date (end of month)	Australia		Austria	Belgium			
	Trade-unionists unemployed		Compulsory insurance, number of unemployed in receipt of benefit	Unemployment-insurance societies			
				Wholly unemployed		Partially unemployed	
				Number	Percent	Number	Percent
1932.....	120,454	29.4	309,969	161,468	19.0	175,259	20.7
1933.....	104,035	25.1	328,844	168,033	17.0	170,023	17.2
1934.....	86,865	20.5	287,528	182,855	19.0	166,229	17.2
1935.....	71,823	15.6	261,768	165,469	17.9	118,754	12.8
1936.....	53,992	12.2	259,185	122,256	13.4	91,451	10.0
1937.....	41,823	9.3	231,313	104,785	11.5	89,281	9.8
<i>1937</i>							
May.....			215,176	95,888	10.6	75,673	8.4
June.....	43,584	9.7	196,067	86,344	9.5	78,052	8.6
July.....			187,360	84,348	9.3	78,831	8.7
August.....			178,081	88,825	9.8	89,606	9.9
September.....	42,145	9.3	176,308	90,574	9.9	84,282	9.3
October.....			188,262	91,993	10.1	81,504	8.9
November.....			224,166	115,564	12.7	110,176	12.1
December.....	37,558	8.2	268,784	136,298	14.9	147,510	16.1
<i>1938</i>							
January.....			302,263	146,678	16.0	178,668	19.4
February.....			¹ 300,294	141,499	15.3	164,444	17.8
March.....	37,111	8.0		131,007	14.2	136,510	14.8
April.....				121,734	13.1	136,141	14.7
May.....			350,228				
June.....			274,627				

¹ Preliminary figure.

Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	Canada	Czechoslovakia		Danzig, Free City of	Denmark		
	Percent of trade- unionists unem- ployed	Number of unem- ployed on live register	Trade-union insur- ance funds—un- employed in re- ceipt of benefit		Number of unem- ployed registered	Trade-union unem- ployment funds— unemployed	
			Number	Percent		Number	Percent
1932.....	22.0	554,059	184,555	13.5	33,244	99,508	31.7
1933.....	22.3	738,267	247,613	16.9	31,408	97,417	28.8
1934.....	18.2	676,994	245,953	17.4	20,326	81,756	22.2
1935.....	15.4	686,269	235,623	15.9	17,983	76,195	19.8
1936.....	13.3	622,687	208,539	13.1	13,553	78,669	19.3
1937.....	10.7	408,949	151,167	8.8	8,009	95,103	21.9
1937							
May.....	9.5	385,061	137,677	8.0	6,526	63,310	14.8
June.....	10.4	303,535	113,838	6.6	4,617	60,199	13.9
July.....	8.9	248,127	110,861	6.4	3,327	66,006	15.2
August.....	7.6	233,318	108,063	6.2	2,984	65,853	15.1
September.....	7.7	230,692	106,496	6.1	2,910	72,387	16.5
October.....	8.9	237,737	107,782	6.1	3,800	84,684	19.2
November.....	11.2	333,455	132,364	7.5	5,028	103,878	23.5
December.....	13.0	459,142	177,972	10.0	9,714	153,384	34.6
1938							
January.....	12.4	519,002	222,050	12.4	10,223	133,083	29.6
February.....	13.7	511,288	220,138	12.3	8,580	127,794	28.3
March.....	12.8	434,506	204,132	11.4	4,722	103,288	22.7
April.....	13.1	360,849	173,487	9.7	3,157	93,524	20.6
May.....		285,795			2,022	80,375	17.7
June.....							

Year and date (end of month)	Estonia	Finland	France	Germany	Great Britain
	Number un- employed re- maining on live register	Number of unemployed registered	Number of unemployed in receipt of benefit	Number of unemployed registered	Number of persons reg- istered with employment exchanges
1932.....	7,121	17,581	273,412	5,579,858	2,757,000
1933.....	8,210	17,139	276,033	4,733,014	2,520,616
1934.....	2,970	10,011	345,033	2,718,309	2,159,231
1935.....	1,779	7,163	426,931	¹ 2,151,039	2,036,422
1936.....	1,276	4,796	432,120	¹ 1,592,630	1,754,975
1937.....	1,158	3,763	350,458	² 912,312	
1937					
May.....	638	3,126	345,503	776,321	1,451,330
June.....	486	2,076	321,725	648,421	1,356,598
July.....	403	2,089	313,553	562,892	1,379,459
August.....	470	2,794	311,315	509,257	1,358,621
September.....	473	3,450	305,341	469,053	³ 1,339,204
October.....	788	3,705	319,223	501,847	1,390,249
November.....	1,473	3,924	332,850	572,621	1,499,203
December.....	1,726	3,770	365,452	994,784	1,665,407
1938					
January.....	2,255	4,579	403,813	1,051,745	1,827,607
February.....	1,798	4,544	412,386	946,431	1,810,421
March.....	1,805	3,635	398,254	507,649	1,748,981
April.....	1,302	3,462	393,054	422,530	1,747,764
May.....	872	2,963	380,826	338,355	1,778,805
June.....			362,899	292,237	1,802,912

¹ Includes the Saar.² New series.

Trend of Employment and Pay Rolls

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Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	Great Britain and Northern Ireland				Hungary		
	Compulsory insurance				Employment exchanges, applications for work	Trade-unionists unemployed	
	Wholly unemployed		Temporary stop-pages			Christian (Buda-pest)	Social Democratic
	Number	Percent	Number	Percent			
1932.....	2,272,590	17.6	573,805	4.5	66,235	1,026	29,772
1933.....	2,110,090	16.4	456,678	3.5	60,595	1,085	26,716
1934.....	1,801,913	13.9	368,906	2.9	52,157	996	22,291
1935.....	1,714,844	13.2	312,958	2.3	52,048	967	18,315
1936.....	1,497,587	11.3	251,379	1.9	52,114	800	15,637
1937.....	1,277,928	9.4	204,020	1.5	48,359	945	14,279
1937							
May.....	1,245,589	9.3	210,401	1.6	50,273	936	13,637
June.....	1,166,881	8.7	203,329	1.6	45,740	729	13,513
July.....	1,136,287	8.5	249,345	1.9	43,915	815	13,169
August.....	1,148,487	8.6	208,941	1.6	45,904	843	12,584
September.....	1,138,731	8.5	194,997	1.5	44,946	864	12,895
October.....	1,215,000	8.9	179,856	1.3	45,187	896	12,896
November.....	1,284,386	9.4	222,204	1.6	36,968	1,116	13,840
December.....	1,338,850	9.8	326,026	2.4	46,132	1,211	16,163
1938							
January.....	1,466,354	10.7	351,483	2.6	49,832	1,270	19,108
February.....	1,466,887	10.7	340,630	2.5	50,442	1,211	18,142
March.....	1,425,596	10.4	338,483	2.5	50,850	1,150	17,486
April.....	1,394,315	10.2	365,599	2.7	47,423	1,061	18,476
May.....	1,375,768	10.0	404,303	3.0	46,445	1,022	18,767
June.....	1,351,865	9.9	477,617	3.5			
Year and date (end of month)	Irish Free State	Japan		Latvia	Netherlands		
	Compulsory insurance—number unemployed	Official estimates, unemployed		Number unemployed remaining on live register	Unemployment insurance societies—unemployed		
		Number	Percent		Number	Percent	
	1932.....	62,817	485,681	6.8	14,587	153,500	29.5
1933.....	72,255	408,710	5.6	8,156	163,000	31.0	
1934.....	103,671	372,941	5.0	4,972	160,400	32.1	
1935.....	119,498	356,103	4.6	4,825	173,673	36.3	
1936.....	99,834			3,851	168,668	36.2	
1937.....	82,425			3,014	137,700	29.2	
1937							
May.....	88,480	300,343	3.8	2,127	124,711	26.5	
June.....	64,011	299,341	3.7	1,446	119,325	25.3	
July.....	63,288	284,551	3.6	1,146	122,982	26.0	
August.....	65,670	277,258	3.5	1,093	124,610	26.3	
September.....	68,928	275,938	3.5	1,075	124,012	26.1	
October.....	68,809	281,215	3.4	1,077	126,621	26.6	
November.....	94,414	270,418	3.4	2,304	138,118	28.9	
December.....	97,855			3,968	155,959	32.4	
1938							
January.....	105,449			4,123	166,288	34.5	
February.....	104,829			4,071	156,575	31.2	
March.....	102,515			3,622	142,578	29.2	
April.....	100,076			2,611	129,450	26.7	
May.....	97,571				125,113	25.8	
June.....					108,072		

* Incomplete figures.

Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	New Zealand	Norway			Poland	Rumania	
	Number unem- ployed registered by employ- ment ex- changes ^a	Trade-unionists (10 unions) unemployed		Number unem- ployed remaining on live register	Number unem- ployed registered with em- ployment offices	Number unem- ployed remaining on live register	
		Number	Percent				
1932	51,549	14,790	30.8	32,705	255,582	38,899	
1933	46,971	16,588	33.4	35,591	249,660	29,060	
1934	39,235	15,963	30.7	35,121	342,166	16,871	
1935	28,234	14,783	25.3	36,103	381,935	13,852	
1936	36,890	13,267	18.8	32,643	367,327	13,549	
1937		16,532	20.0	28,520	375,088	10,851	
1937							
May	28,302	14,813	18.1	26,298	334,527	10,784	
June	29,326	13,020	15.6	22,028	294,334	6,396	
July	30,443	12,772	15.2	18,572	278,361	5,822	
August	27,323	13,221	15.6	20,045	261,386	5,878	
September	25,053	14,503	17.0	25,431	252,719	6,083	
October	^a 14,682	16,286	19.1	29,063	263,615	6,343	
November	11,276	18,827	22.0	32,239	329,474	8,341	
December	8,367	22,687	26.6	33,906	463,175	12,135	
1938							
January	8,056	24,746	28.9	33,046	546,947	12,096	
February	7,241	24,321	28.2	35,311	547,983	11,927	
March	6,695	22,916	26.5	34,104	493,000	10,907	
April	7,215	21,256	24.5	29,850	393,291		
May	8,314			25,693	304,336		
June							
Year and date (end of month)	Sweden		Switzerland				Yugo- slavia
	Trade-unionists unemployed		Unemployment funds				Number of unem- ployed regis- tered
	Number	Percent	Wholly unem- ployed		Partially unem- ployed		
			Number	Percent	Number	Percent	
1932	80,922	22.8		9.1		12.2	14,761
1933	97,316	23.7		10.8		8.5	15,997
1934	80,216	18.9		9.8		6.1	15,647
1935	81,385	16.1		11.8		5.9	16,752
1936	71,552	13.6		13.2		5.3	19,436
1937	67,351	11.6		10.0		2.5	21,650
1937							
May	51,903	9.2	37,800	7.2	10,200	1.9	16,936
June	49,109	8.6	34,082	6.4	10,217	1.9	11,258
July	42,451	7.4	34,300	6.6	10,300	1.9	11,543
August	40,953	7.1	34,800	6.7	10,900	2.0	10,845
September	43,474	7.5	36,404	6.8	11,194	2.1	12,250
October	52,870	9.0	40,000	7.6	13,000	2.4	13,719
November	69,533	11.7	50,000	9.5	16,200	3.0	18,494
December	109,621	18.5	71,613	13.4	18,877	3.5	29,988
1938							
January	92,909	15.4	77,900	14.0	20,900	4.0	44,234
February	89,614	14.5	75,900	13.6	23,400	4.4	42,145
March	84,474	13.7	52,007	9.6	25,074	4.7	36,413
April	71,812	11.6	42,100	7.5	24,200	4.6	29,184
May	56,281	9.1					18,023
June							

¹ New series from 1933 on.² New series.

Building Operations

SUMMARY OF BUILDING CONSTRUCTION IN PRINCIPAL CITIES, JUNE 1938 ¹

PERMIT valuations for all types of building construction in 2,054 identical cities for which reports were received in May and June registered increases in June. The greatest increase (45.3 percent) was reported for new nonresidential buildings. The value of new residential buildings for which permits were issued was 12.0 percent higher and the value of additions, alterations, and repairs showed a gain of 3.7 percent. For all classes of construction the value of permits issued in June was 18.3 percent above the May level.

For the second consecutive month a larger number of dwelling units were provided in new residential buildings for which permits were issued than in the corresponding month of 1937. While there was a decrease of 4.2 percent in the value of new residential buildings, comparing June 1938 with the corresponding month of 1937, there was an increase of 4.9 percent in the number of dwelling units provided in housekeeping structures. The value of new nonresidential buildings decreased 4.5 percent over the year period, while permit valuations of additions, alterations, and repairs to existing structures declined 24.4 percent. Total permit valuations for June 1938 showed a decline of 9.1 percent compared with June 1937. Comparisons of data for June 1938 with June 1937 are based on reports from 1,573 identical cities.

Comparison of June 1938 with May 1938

A summary of building construction in 2,054 identical cities in May and June 1938 is given in table 1.

TABLE 1.—*Summary of Building Construction for Which Permits Were Issued in 2,054 Identical Cities, May and June 1938*

Class of construction	Number of buildings			Permit valuation		
	June 1938	May 1938	Per-centage change	June 1938	May 1938	Per-centage change
All construction.....	61,029	61,662	-1.0	\$140,481,118	\$118,706,508	+18.3
New residential.....	14,603	13,927	+4.9	70,325,522	62,816,350	+12.0
New nonresidential.....	10,519	10,678	-1.5	42,629,264	29,347,688	+45.3
Additions, alterations, and repairs.....	35,907	37,057	-3.1	27,526,332	26,542,470	+3.7

¹ More detailed information by geographic divisions and individual cities is given in a separate pamphlet entitled "Building Construction, June 1938", copies of which will be furnished upon request.

Comparison of June 1938 with June 1937

Table 2 presents a summary of the number of buildings and value of permits issued in 1,573 identical cities in June 1938 compared with the corresponding month of 1937.

TABLE 2.—Summary of Building Construction for Which Permits Were Issued in 1,573 Identical Cities, June 1937 and June 1938

Class of construction	Number of buildings			Permit valuation		
	June 1938	June 1937	Per-centage change	June 1938	June 1937	Per-centage change
All construction.....	59,785	63,448	-5.8	\$138,066,937	\$151,873,099	-9.1
New residential.....	14,111	12,207	+15.6	68,594,699	71,632,203	-4.2
New nonresidential.....	10,257	10,963	-6.4	42,221,549	44,195,056	-4.5
Additions, alterations, and repairs....	35,417	40,278	-12.1	27,250,689	36,045,840	-24.4

A summary of permit valuations of housekeeping dwellings and the number of families provided for in new dwellings in 2,054 identical cities having a population of 1,000 and over, is shown in table 3 for June compared with May 1938.

TABLE 3.—Permit Valuation of Housekeeping Dwellings and Number of Families Provided for in 2,054 Identical Cities, May and June 1938

Type of dwelling	Permit valuation of housekeeping dwellings			Number of families provided for in new dwellings		
	June 1938	May 1938	Per-centage change	June 1938	May 1938	Per-centage change
All types.....	\$68,920,867	\$62,472,400	+10.3	18,173	16,845	+7.9
1-family.....	54,989,994	52,311,576	+5.1	13,562	13,056	+3.9
2-family ¹	3,080,180	2,844,855	+8.3	1,142	1,037	+10.1
Multifamily ²	10,850,693	7,315,969	+48.3	3,469	2,752	+26.1

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

Table 4 shows a comparison of the value of permits issued for housekeeping dwellings and the number of families provided for in new dwellings in 1,573 identical cities with a population of 2,500 and over in June 1938 with the corresponding month of the preceding year.

TABLE 4.—Permit Valuation of Housekeeping Dwellings and Number of Families Provided for in 1,573 Identical Cities, June 1937 and June 1938

Type of dwelling	Permit valuation of housekeeping dwellings			Number of families provided for in new dwellings		
	June 1938	June 1937	Percentage change	June 1938	June 1937	Percentage change
All types.....	\$67, 195, 614	\$70, 723, 397	-5. 0	17, 667	16, 834	+4. 9
1-family.....	53, 369, 513	49, 277, 947	+8. 3	13, 101	11, 207	+16. 9
2-family ¹	2, 987, 908	2, 750, 641	+8. 6	1, 103	993	+11. 1
Multifamily ²	10, 838, 193	18, 694, 809	-42. 0	3, 463	4, 634	-25. 3

¹ Includes 1- and 2-family dwellings with stores. ² Includes multifamily dwellings with stores.

Analysis by Size of City, June 1938

Table 5 shows the value of permits issued for building construction in June 1938 compared with May 1938 and June 1937, by size of city and by class of construction.

TABLE 5.—Permit Valuation of Building Construction, by Size of City, June 1938

Size of city	Number of cities	Total construction			New residential buildings		
		Permit valuation, June 1938	Percentage change from—		Permit valuation, June 1938	Percentage change from—	
			May 1938	June 1937 ¹		May 1938	June 1937 ¹
Total, all cities.....	2, 054	\$140, 481, 118	+18. 3	—9. 1	\$70, 325, 522	+12. 0	—4. 2
500,000 and over.....	14	51, 356, 221	+40. 7	—2. 3	22, 751, 915	+21. 2	+1. 0
100,000 and under 500,000.....	79	28, 201, 535	—2. 7	—21. 5	13, 240, 325	—4. 9	—15. 0
50,000 and under 100,000.....	96	12, 838, 575	+9. 5	—17. 8	6, 095, 382	+4. 0	—16. 7
25,000 and under 50,000.....	160	11, 832, 633	+0. 4	—12. 3	6, 189, 614	—0. 6	+2. 5
10,000 and under 25,000.....	427	19, 081, 215	+22. 1	—4. 8	10, 713, 723	+17. 0	—4. 7
5,000 and under 10,000.....	351	7, 868, 986	+9. 5	—16. 3	5, 282, 502	+20. 5	—9. 4
2,500 and under 5,000.....	446	6, 887, 772	+59. 1	+42. 2	4, 321, 238	+49. 1	+39. 8
1,000 and under 2,500.....	481	2, 414, 181	—5. 2	-----	1, 730, 823	+8. 6	-----

Size of city	New nonresidential buildings			Additions, alterations, and repairs			Population (census of 1930)
	Permit valuation, June 1938	Percentage change from—		Permit valuation, June 1938	Percentage change from—		
		May 1938	June 1937 ¹		May 1938	June 1937 ¹	
Total, all cities.....	\$42, 629, 264	+45. 3	—4. 5	\$27, 526, 332	+3. 7	—24. 4	59, 871, 525
500,000 and over.....	18, 154, 540	+120. 4	+27. 0	10, 449, 766	+10. 1	—33. 6	21, 449, 853
100,000 and under 500,000.....	8, 601, 029	+12. 2	—31. 7	6, 360, 181	—14. 0	—17. 9	15, 017, 880
50,000 and under 100,000.....	4, 052, 514	+16. 3	—10. 3	2, 690, 679	+12. 9	—29. 0	6, 374, 308
25,000 and under 50,000.....	2, 456, 069	—12. 8	—41. 2	3, 186, 950	+16. 4	—2. 5	5, 629, 127
10,000 and under 25,000.....	5, 651, 375	+44. 6	+9. 2	2, 716, 117	+5. 6	—25. 0	6, 553, 363
5,000 and under 10,000.....	1, 449, 844	—12. 3	—37. 3	1, 136, 640	—1. 3	—9. 4	2, 480, 013
2,500 and under 5,000.....	1, 856, 178	+105. 7	+65. 4	710, 356	+34. 1	+12. 8	1, 596, 149
1,000 and under 2,500.....	407, 715	—39. 9	-----	275, 643	+1. 0	-----	770, 832

¹ Based on 1,573 reporting cities.

The permit valuation of housekeeping dwellings in the 2,054 identical cities reporting for May and June 1938, together with the number of family-dwelling units provided in new dwellings, by size of city, is given in table 6.

TABLE 6.—Permit Valuation of Housekeeping Dwellings and Number of Families Provided for in 2,054 Identical Cities, by Size of City, May and June 1938

Size of city	Permit valuation of housekeeping dwellings			Number of families provided for in—							
	June 1938	May 1938	Percentage change	All types		1-family dwellings		2-family dwellings ¹		Multi-family dwellings ²	
				June 1938	May 1938	June 1938	May 1938	June 1938	May 1938	June 1938	May 1938
Total, all cities.....	\$68,920,867	\$62,472,400	+10.3	18,173	16,845	13,562	13,056	1,142	1,037	3,469	2,732
500,000 and over.....	22,676,915	18,684,243	+21.4	5,732	4,533	3,431	3,331	275	254	2,046	948
100,000 and under 500,000.....	13,016,204	13,913,136	-6.4	3,489	4,124	2,818	2,653	328	287	343	1,184
50,000 and under 100,000.....	5,907,968	5,847,314	+1.0	1,557	1,548	1,266	1,264	176	137	115	147
25,000 and under 50,000.....	6,120,864	6,194,366	-1.2	1,628	1,719	1,384	1,411	108	96	136	212
10,000 and under 25,000.....	10,530,723	9,063,511	+16.2	2,927	2,419	2,250	2,221	117	108	560	90
5,000 and under 10,000.....	5,173,202	4,304,664	+20.2	1,357	1,161	1,137	993	51	49	169	119
2,500 and under 5,000.....	3,769,738	2,873,431	+31.2	957	842	815	748	48	68	94	26
1,000 and under 2,500.....	1,725,253	1,591,735	+8.4	506	499	461	435	39	38	6	26

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

Construction During First 6 Months, 1937 and 1938

Cumulative totals for the first 6 months of 1938 compared with the same months of the preceding year are shown in table 7. The data are based on reports received from cities having a population of 2,500 and over.

TABLE 7.—Permit Valuation of Building Construction, First 6 Months of 1937 and of 1938, by Class of Construction

Class of construction	Permit valuation of building construction, first 6 months of—		
	1938	1937	Percentage change
All construction.....	\$782,696,953	\$877,416,717	-10.8
New residential.....	375,445,163	421,643,924	-11.0
New nonresidential.....	248,394,150	265,616,356	-6.5
Additions, alterations, and repairs.....	158,857,640	190,156,437	-16.5

Table 8 presents the permit valuation of housekeeping dwellings and number of family-dwelling units provided in cities with a population of 2,500 and over for the first 6 months of 1937 and 1938.

TABLE 8.—*Permit Valuation of Housekeeping Dwellings and Number of Families Provided for in New Dwellings, First 6 Months of 1937 and of 1938, by Type of Dwelling*

Type of dwelling	Permit valuation of housekeeping dwellings			Number of families provided for		
	First 6 months of—		Per-centage change	First 6 months of—		Per-centage change
	1938	1937		1938	1937	
All types.....	\$372, 163, 346	\$415, 838, 356	—10. 5	103, 730	103, 237	+0. 5
1-family.....	243, 715, 262	296, 734, 876	—17. 9	61, 623	66, 414	—7. 2
2-family ¹	16, 140, 067	17, 697, 372	—8. 8	6, 219	6, 256	—0. 6
Multifamily ²	112, 308, 017	101, 406, 108	+10. 8	35, 888	30, 567	+17. 4

¹ Includes 1- and 2-family dwellings with stores.

² Includes multifamily dwellings with stores.

The information on building permits issued during May and June 1938 is based on reports received by the Bureau of Labor Statistics from 2,054 identical cities having a population of 1,000 and over. The data for June 1937 and 1938 are based on reports from 1,573 identical cities with a population of 2,500 and over.

The information is collected by the Bureau of Labor Statistics from local building officials, except in the States of Illinois, Massachusetts, New Jersey, New York, North Carolina, and Pennsylvania, where the State departments of labor collect and forward the information to the Bureau. The permit valuations shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are included in the Bureau's tabulation. In addition to permits issued for private and municipal building construction, the statistics include the value of contracts for Federal and State buildings in the cities covered by the report. Data concerning public buildings are collected by the Bureau from the various Federal and State agencies having the power to award contracts for building construction. In June 1938 the value of these public buildings amounted to \$7,845,000; in May 1938, to \$4,152,000; and in June 1937, to \$19,084,000.

Construction from Public Funds

The value of contracts awarded and force-account work started during June 1938, May 1938, and June 1937 on construction projects financed from various Federal funds is shown in table 9.

TABLE 9.—*Value of Contracts Awarded and Force-Account Work Started on Projects Financed From Federal Funds, May and June 1938 and June 1937*¹

Federal agency	Value of contracts awarded and force-account work started—		
	June 1938	May 1938 ²	June 1937 ¹
Total.....	\$72,325,819	\$87,980,852	\$128,525,374
Public Works Administration:			
Federal.....	348,320	398,250	3,359,184
Non-Federal:			
N. I. R. A.....	1,323,958	5,819,077	31,576,913
E. R. A. A.....	14,609,426	10,904,584	27,340,858
Federal projects under The Works Program.....	787,438	7,816,410	13,798,457
Regular Federal appropriations.....	55,256,677	63,042,522	52,449,960

¹ Preliminary, subject to revision.² Revised.

The value of public-building and highway construction awards financed wholly from appropriations from State funds, as reported by the various State governments for June 1938, May 1938, and June 1937 is shown in table 10.

TABLE 10.—*Value of Public-Building and Highway-Construction Awards Financed Wholly From State Funds*

Type of project	Value of contracts		
	June 1938	May 1938	June 1937
Public building.....	\$1,708,748	\$938,211	\$1,502,467
Highway construction.....	11,474,437	13,571,996	8,621,883

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Retail Prices

SUMMARY FOR JUNE 1938

Food, Electricity, and Gas

FOOD costs for June increased 1.3 percent in the month largely as a result of increases in prices of fresh fruits and vegetables. Advances in the all-food indexes were shown for 41 of the 51 cities.

Residential rates for electricity decreased between March and June in eight cities, five of which are on or near the Atlantic coast. Lower rates were also reported for two cities for gas, one on the Atlantic coast and one on the Pacific. A majority of the reductions provided substantial decreases in the cost of these commodities.

FOOD PRICES IN JUNE 1938

THE composite index for all foods increased 1.3 percent between May and June due primarily to increases in prices of fresh fruits and vegetables. Advances in costs of food for 41 cities ranged from 0.2 to 3.9 percent.

The June index was 80.2 percent of the 1923-25 average. This was 7.1 percent lower than in June 1937 when the index was 86.3. Lower costs in the year were recorded for all commodity groups except eggs which advanced 1.4 percent. As compared with June 1933 the cost of food showed an increase of 23.5 percent. It was, however, 22.7 percent below the level of June 1929.

Details by Commodity Groups

The cost of cereals and bakery products declined 0.4 percent between May and June. The most important change in the group was a decrease of 2.4 percent in the price of flour. Six other items showed price recessions ranging from 0.1 to 0.9 percent; four items, including white bread and whole-wheat bread, remained unchanged; and two items, rye bread and cake, advanced slightly. The index for the group was 4.0 percent below the level of June 1937.

Costs of meat advanced 1.7 percent, continuing the upward movement of the 3 preceding months, and reached the highest level recorded

for 1938. Prices of all beef items except plate increased during the month. The greatest advance, 4.0 percent, was shown for round steak. Pork chops and loin roast advanced 5.2 and 5.4 percent, respectively. Lesser increases were reported for cured pork products. Higher prices for lamb showed increases ranging from 1.8 percent for rib chops to 4.3 percent for leg. The average price of roasting chickens declined 1.8 percent and canned salmon prices were slightly lower. Despite the advance during the month the cost of meat showed a decrease of 5.3 percent as compared with the corresponding month of 1937.

The decline of 1.5 percent in the cost of dairy products was slightly greater than the normal seasonal drop. This was due in large part to the continued downward movement in the price of butter, which reached the lowest level since the fall of 1935. Price reductions reported from 47 of the 51 cities during the month resulted in an average decrease of 3.1 percent. Milk prices averaged 1 cent a quart lower in Buffalo; 1.2 cents in Detroit; and 2 cents in Atlanta. Minor changes were reported for several other cities. The decrease for all cities combined was 0.6 percent. The index for the group was 4.6 percent lower than in June 1937.

Egg prices followed the seasonal trend and advanced 4.8 percent. Increases were reported from 46 cities, ranging from 0.2 percent in Mobile to 13.6 percent in Richmond. Egg prices registered a 1.4 percent increase over June of the preceding year.

The composite index for fruits and vegetables advanced 5.7 percent during the month. This was due entirely to the increase of 6.7 percent in the cost of fresh fruits and vegetables. The most marked price increases were 11.2 percent for potatoes, 18.3 percent for apples, and 13.8 percent for celery. Advances for five other items ranged from 0.3 percent for bananas to 7.1 percent for sweetpotatoes. Prices of lettuce declined 15.7 percent and spinach 10.6 percent. Lower prices were shown for all of the canned and dried fruits and vegetables with the exception of dried navy beans which increased 0.4 percent. The index for the entire group, which reached the highest level since July 1937, was, nevertheless, 16.6 percent lower than in June of that year.

The index for beverages and chocolate showed a continuation of the decline which began in September 1937. The decrease of 0.1 percent in the month resulted from a further drop of 0.5 percent in the price of coffee. Prices of tea, cocoa, and chocolate advanced slightly.

The cost of fats and oils was 0.8 percent lower than in May. The price of lard which has tended downward since October 1937 decreased 1.5 percent. Oleomargarine prices averaged 1.2 percent lower and other items showed little or no change. The cost for the group dropped 15.2 percent during the year.

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TABLE

All food

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A decrease of 0.8 percent in the cost of sugar and sweets was due to lower prices for all items in the group. Price reductions in 30 cities contributed to the reduction of 0.9 percent for sugar which has reached the lowest price level since June 1934.

Indexes of retail food costs for June and May 1938, together with indexes for June 1937, 1933, and 1929, are shown in table 1. The accompanying chart shows trends in the cost of all foods and of each major commodity group for the period from January 1929 to June 1938, inclusive.

TABLE 1.—*Indexes of Retail Food Costs in 51 Large Cities Combined,¹ by Commodity Groups, June and May 1938 and June 1937, 1933, and 1929*

[1923-25=100]

Commodity group	1938		1937	1933	1929
	June 14 ²	May 17	June 15	June 15	June 15
All foods.....	80.2	79.1	86.3	64.9	103.7
Cereals and bakery products.....	91.8	92.2	95.6	71.8	97.7
Meats.....	96.9	95.2	102.3	65.9	123.3
Dairy products.....	76.0	77.2	79.7	64.7	101.4
Eggs.....	63.4	60.5	62.5	43.5	85.7
Fruits and vegetables.....	66.0	62.5	79.2	67.5	98.2
Fresh.....	65.2	61.1	78.5	68.9	97.8
Canned.....	78.2	78.5	83.4	66.7	98.1
Dried.....	59.0	59.3	76.6	52.5	102.5
Beverages and chocolate.....	66.8	66.9	70.0	67.3	110.5
Fats and oils.....	67.4	68.0	79.5	40.9	93.4
Sugar and sweets.....	63.8	64.3	65.7	61.0	72.3

¹ Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined with the use of population weights.

² Preliminary.

Prices of each of the 84 foods for 51 cities are combined with the use of both consumption and population weights. Quantity weights for each food include the average family consumption in each city, not only of the food priced, but for groups of foods which are related in kind and which seem to follow the same price trend. These weights are based on the cost of living study of 1917-19. Population weights are averages of the population in 1920 and 1930 for each city, including adjacent metropolitan areas and cities of over 50,000 in the same region.

Prices of 31 of the 84 foods included in the index were higher in June than in May, 46 were lower, and 7 showed no change. Prices of 70 items were lower than in June 1937, 13 were higher, and 1 showed no change.

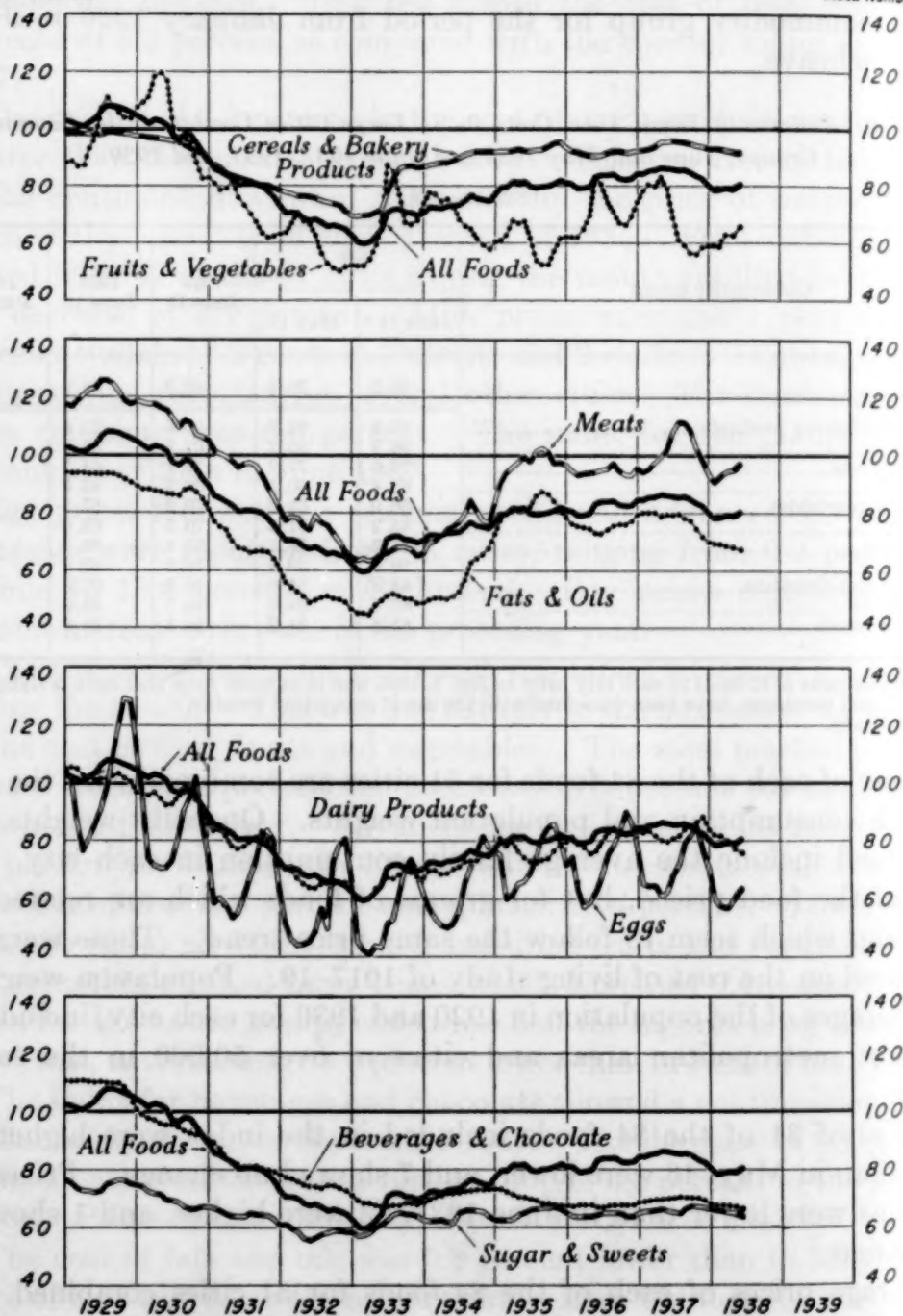
Average prices of each of the 84 foods for 51 cities combined are shown in table 2 for June and May 1938 and June 1937.

RETAIL COST OF FOOD

1923-25=100

Index Numbers

Index Numbers



UNITED STATES BUREAU OF LABOR STATISTICS

TABLE 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined, June and May 1938 and June 1937

[*Indicates the 42 foods included in indexes prior to Jan. 1, 1935]

Article	1938		1937 [*]
	June 14 ¹	May 17	June 15
Cereals and bakery products:			
Cereals:			
*Flour, wheat.....pound	4.0	4.1	5.0
*Macaroni.....do	14.8	14.9	15.4
*Wheat cereal.....28-oz. package	24.4	24.4	24.6
*Corn flakes.....8-oz. package	7.3	7.4	8.0
*Corn meal.....pound	4.7	4.8	5.5
Hominy grits.....24-oz. package	8.7	8.8	9.7
*Rice.....pound	7.8	7.8	8.5
*Rolled oats.....do	7.2	7.2	7.5
Bakery products:			
*Bread, white.....do	8.8	8.8	8.9
Bread, whole-wheat.....do	9.8	9.8	9.8
Bread, rye.....do	10.1	10.0	10.0
Cake.....do	24.9	24.9	24.8
Soda crackers.....do	16.3	16.3	18.0
Meats:			
Beef:			
*Sirloin steak.....do	38.5	37.5	44.0
*Round steak.....do	36.0	34.6	40.0
*Rib roast.....do	29.5	28.8	33.3
*Chuck roast.....do	23.2	22.8	25.9
*Plate.....do	15.3	15.3	16.8
Liver.....do	26.1	25.7	25.0
Veal:			
Cutlets.....do	42.0	41.8	42.4
Pork:			
*Chops.....do	34.7	33.0	37.8
Loin roast.....do	28.3	26.9	31.4
*Bacon, sliced.....do	36.5	36.7	40.7
Bacon, strip.....do	30.9	30.7	34.0
*Ham, sliced.....do	46.4	45.8	50.0
Ham, whole.....do	28.9	28.4	30.9
Salt pork.....do	20.6	20.5	24.3
Lamb:			
Breast.....do	13.1	12.7	14.5
Chuck.....do	22.7	21.8	24.5
*Leg.....do	29.7	28.4	31.8
Rib chops.....do	36.1	35.4	40.0
Poultry:			
*Roasting chickens.....do	35.5	36.1	33.1
Fish:			
Salmon, pink.....16-oz. can	13.4	13.7	13.0
*Salmon, red.....do	26.8	26.8	25.1
Dairy products:			
*Butter.....pound	32.2	33.3	38.0
*Cheese.....do	26.2	26.8	28.4
Cream.....½ pint	14.4	14.5	14.5
Milk, fresh (delivered and store).....quart	12.0	12.1	11.8
*Milk, fresh (delivered).....do	12.3	12.4	12.1
Milk, fresh (store).....do	11.3	11.4	11.2
*Milk, evaporated.....14½-oz. can	7.1	7.1	7.5
*Eggs.....dozen	32.3	30.8	32.3
Fruits and vegetables:			
Fresh:			
Apples.....pound	5.6	4.7	8.2
*Bananas.....do	6.1	6.1	6.4
Lemons.....dozen	26.7	27.2	33.6
*Oranges.....do	26.5	25.8	40.8
Beans, green.....pound	9.3	8.8	10.7
*Cabbage.....do	3.8	3.8	4.0
Carrots.....bunch	6.0	6.1	9.4
Celery.....stalk	9.3	8.2	11.5
Lettuce.....head	8.2	9.7	7.7
*Onions.....pound	4.6	5.0	4.4
*Potatoes.....do	2.7	2.4	2.9
Spinach.....do	5.0	5.6	6.2
Sweetpotatoes.....do	4.5	4.2	6.1
Canned:			
Peaches.....no. 2½ can	19.3	19.5	19.3
Pears.....do	21.6	21.7	21.9
Pineapple.....do	22.4	23.1	22.7
Asparagus.....no. 2 can	29.9	30.2	28.7
Beans, green.....do	11.4	11.5	12.4

¹ Preliminary.

TABLE 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined, June and May 1938 and June 1937—Continued

[*Indicates the 42 foods included in indexes prior to Jan. 1, 1935]

Article	1938		1937
	June 14	May 17	June 15
Fruits and vegetables—Continued.			
Canned—Continued.			
*Beans with pork.....16-oz. can.....	7.4	7.4	8.0
*Corn.....no. 2 can.....	11.7	11.7	13.0
*Peas.....do.....	15.4	15.4	16.3
*Tomatoes.....do.....	8.9	8.9	9.5
Tomato soup.....10½-oz. can.....	7.4	7.4	8.2
Dried:			
Peaches.....pound.....	15.5	15.5	17.3
*Prunes.....do.....	9.2	9.2	10.5
*Raisins.....15-oz. package.....	10.0	10.0	10.1
Black-eyed peas.....pound.....	7.4	7.7	9.9
Lima beans.....do.....	9.0	9.1	12.1
*Navy beans.....do.....	6.3	6.3	10.9
Beverages and chocolate:			
*Coffee.....do.....	23.1	23.2	25.7
*Tea.....¼ pound.....	17.8	17.6	18.0
Cocoa.....8-oz. can.....	8.7	8.6	10.5
Chocolate.....8-oz. package.....	16.2	16.1	16.4
Fats and oils:			
*Lard.....pound.....	12.7	12.9	17.1
Lard compound.....do.....	13.0	13.1	15.9
*Vegetable shortening.....do.....	19.4	19.5	22.0
Salad oil.....pint.....	24.7	24.8	25.6
Mayonnaise.....½ pint.....	17.5	17.5	17.5
*Oleomargarine.....pound.....	17.1	17.3	18.9
Peanut butter.....do.....	18.5	18.6	19.9
Sugar and sweets:			
*Sugar.....do.....	5.3	5.4	5.6
Corn sirup.....24-oz. can.....	13.9	14.0	14.7
Molasses.....18 oz. can.....	13.7	13.9	14.5
*Strawberry preserves.....pound.....	21.6	21.7	21.8

¹ Quotations for 1938 are for sales in units of 10 pounds each. Prior to November 1937, prices were quoted on sales in units of various sizes. The change to a common unit, 10 pounds, resulted in a reduction of ½ of 1 cent per pound at the time of revision.

Details by Regions and Cities

The increase of 1.3 percent in the composite index for all foods between May and June reflected advances in food costs for 41 of the 51 reporting cities.

The greatest increases, 3.9 percent in Peoria and 3.4 percent in Columbus and Salt Lake City, were largely due to higher prices for fresh fruits and vegetables. The cost for this subgroup showed increases averaging between 15 and 16 percent in each of these cities. Higher prices for meats and eggs in Peoria and Columbus, and for eggs in Salt Lake City also contributed to the advance.

The greatest decreases, 1.9 percent in Norfolk, 1.3 percent in Buffalo, and 1.0 percent in Little Rock, resulted in large part from movements in prices of fresh fruits and vegetables which were contrary to those of most of the cities. Costs for the subgroup in these cities declined 9.2 percent in Norfolk, 3.5 percent in Buffalo, and 3.8 percent in Little Rock. A decrease of 1 cent a quart for milk also contributed to the decrease in Buffalo.

The all-food index for each of the 51 cities was lower than in June 1937. The decreases ranged from 14.5 percent in Birmingham to 3.3 percent in New York.

Indexes of retail costs of food by regions and cities are given in table 3 for June and May 1938 and June 1937.

TABLE 3.—Indexes of the Average Retail Cost of All Foods, by Regions and Cities,¹ June and May 1938 and June 1937

[1923-25=100]

Region and city	1938		1937	Region and city	1938		1937
	June 14 ²	May 17	June 15		June 14	May 17	June 15
United States.....	80.2	79.1	86.3	South Atlantic.....	77.6	77.5	85.3
New England.....	78.4	77.0	84.0	Atlanta.....	72.5	72.9	83.5
Boston.....	76.1	74.7	81.3	Baltimore.....	84.2	84.0	89.0
Bridgeport.....	84.3	83.1	90.2	Charleston, S. C.....	78.2	78.3	84.7
Fall River.....	81.9	79.7	87.1	Jacksonville.....	76.8	76.3	82.3
Manchester.....	81.9	80.9	87.3	Norfolk.....	74.7	76.2	86.0
New Haven.....	82.8	81.7	89.3	Richmond.....	70.7	70.9	81.7
Portland, Maine.....	79.3	77.3	86.9	Savannah.....	78.4	77.2	84.3
Providence.....	78.4	76.8	84.1	Washington, D. C.....	80.6	79.4	87.1
Middle Atlantic.....	80.8	80.1	85.9	East South Central.....	73.5	72.5	83.8
Buffalo.....	77.6	78.6	87.3	Birmingham.....	68.6	67.2	80.2
Newark.....	82.2	82.0	86.7	Louisville.....	83.5	82.5	92.9
New York.....	80.8	79.9	83.6	Memphis.....	75.3	76.0	83.5
Philadelphia.....	82.2	81.5	89.1	Mobile.....	75.3	75.1	81.6
Pittsburgh.....	79.6	79.0	85.4	West South Central.....	76.2	76.4	82.3
Rochester.....	83.0	80.6	90.1	Dallas.....	72.8	73.0	80.4
Scranton.....	77.1	77.1	84.5	Houston.....	76.5	77.0	81.5
East North Central.....	82.0	80.5	88.7	Little Rock.....	72.3	73.1	82.7
Chicago.....	82.5	81.1	89.0	New Orleans.....	81.7	80.8	85.8
Cincinnati.....	81.9	79.5	90.5	Mountain.....	83.5	82.1	91.3
Cleveland.....	81.7	80.2	86.8	Butte.....	79.2	77.8	85.9
Columbus, Ohio.....	80.2	77.6	86.9	Denver.....	85.7	85.1	93.2
Detroit.....	81.4	80.0	89.0	Salt Lake City.....	80.6	78.0	89.4
Indianapolis.....	81.3	80.8	90.2	Pacific.....	77.2	76.4	83.6
Milwaukee.....	87.0	85.4	92.9	Los Angeles.....	72.2	71.9	79.4
Peoria.....	83.7	80.6	90.1	Portland, Oreg.....	80.9	79.5	90.0
Springfield, Ill.....	81.3	79.1	87.0	San Francisco.....	81.3	80.1	85.9
West North Central.....	83.7	82.0	91.4	Seattle.....	79.6	78.4	86.5
Kansas City.....	82.0	80.4	91.3				
Minneapolis.....	87.4	84.7	94.2				
Omaha.....	78.0	76.7	87.2				
St. Louis.....	85.9	84.5	92.3				
St. Paul.....	83.6	81.3	91.1				

¹ Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined for regions and for the United States with the use of population weights.

² Preliminary

ELECTRICITY PRICES IN JUNE 1938

RESIDENTIAL rates for electricity are secured quarterly from 51 cities. These rates are used for computing average prices and typical bills in each city for the quantities of electricity which most nearly approximate the consumption requirements for the usual domestic services for a five-room house, including living room, dining room, kitchen, and two bedrooms. The blocks of consumption which have been selected as representative of average conditions

throughout the country are 25 and 40 kilowatt-hours for the use of electricity for lighting and small appliances alone; 100 kilowatt-hours for lighting, small appliances, and a refrigerator; and 250 kilowatt-hours for the addition of an electric range to the preceding equipment.

The December report shows prices effective for that month in each city, together with a record of all changes which occurred during the preceding 12 months. Reports for March, June, and September show only the changes which occurred during the preceding quarter.

Technical specifications which are used as the basis for the application of the rate schedules are:

Floor area (1,000 square feet).	
Connected load:	
Lighting and appliances	700
Refrigeration	300
Cooking	6,000
Measured demand:	
Lighting and appliances	600
Refrigeration	100
Cooking	2,300
Outlets: Fourteen 50-watt.	
Active room count: In accordance with schedule of rates.	

Price Changes Between March and June 1938

Residential rates for electricity were reduced between March and June in the following eight cities, five of which represent States along the Atlantic coast, two in the Midwest, and one in the Rocky Mountain area:

Bridgeport.	Jacksonville.
New Haven.	Indianapolis.
New York (Richmond Borough).	Kansas City.
Charleston, S. C.	Salt Lake City.

Charleston and Salt Lake City discontinued the use of the "Objective rate plan"¹ which had been in operation approximately 4 years and 3 years respectively in those cities. The "Objective" rate which was in effect at the time of the change was retained and made available to all customers. A majority of the customers in each city were already being served under this schedule and the reductions therefore affected only from 35 to 40 percent of the customers, or those who previously had been served under the "Present" or "Immediate" rates.

Reductions in the cost of 100 kilowatt-hours and 250 kilowatt-hours, typical respectively of the use of refrigerator and of refrigerator and range in addition to lighting and small appliances, were recorded for each of the eight cities. The greatest general decreases occurred in

See footnote on p. 443.

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the two cities which had discontinued the "Objective rate plan." In Charleston the cost for 100 kilowatt-hours declined 21.5 percent, and for 250 kilowatt-hours, 22.9 percent. In Salt Lake City the cost for 100 kilowatt-hours dropped 22.2 percent and a smaller decrease, 9.1 percent, was reported for 250 kilowatt-hours. Substantial decreases of about 17 percent were shown for these services in Bridgeport and New Haven. Reductions for other cities ranged from 6.3 to 10.2 percent for 100 kilowatt-hours, and from 3.2 to 12.9 percent for 250 kilowatt-hours.

The cost for 25 kilowatt-hours and 40 kilowatt-hours, which are representative of the use of current for lighting and small appliances, remained unchanged in Indianapolis as did the cost for 25 kilowatt-hours in Bridgeport, New Haven, and Salt Lake City. Reductions of more than 20 percent were reported for the use of both 25 and 40 kilowatt-hours in the Borough of Richmond, New York City, and for 25 kilowatt-hours in Kansas City. Decreases for these two services for other cities ranged from 4.3 percent for 40 kilowatt-hours in Salt Lake City to 14.3 percent for 25 kilowatt-hours in Jacksonville.

The cost of electricity in each of the five boroughs in New York City was advanced 1 percent by the increase in the city sales tax from 2 percent to 3 percent. A further slight advance for Bronx, Brooklyn, Manhattan, and Queens resulted from an adjustment under the fuel clause due to an advance in the cost of fuel.

A record of the change in electricity rates in Little Rock, effective February 1, 1938, was not received in time to be included in the March report. These rates present a single schedule to replace the "Present" and "Centennial" rates which were applicable for 2 years prior to that time under the "Objective rate plan."¹ The net monthly bills under the new rate schedule showed decreases to customers formerly served under both the "Present" and the "Centennial" rates.

Changes in net monthly bills and average prices of electricity between March and June 1938 are shown in table 4 for eight cities; and between December 1937 and March 1938 for one city.

¹ The "Objective rate plan" is devised to encourage the use of electricity by providing two separate rate schedules—"Immediate" and "Objective." The "Objective," or lower rates, are available to customers who have increased their use of current. Monthly "base bills" are computed for each customer on the basis of his consumption of electricity for a designated earlier year. The "Immediate" rate applies as long as the resulting bill is less than the "base bill" for the corresponding month. The "Objective" rate applies when, due to an increase in consumption, it produces a bill greater than the "base bill." When the amount of current consumed results in a bill greater than the "base bill" if the "Immediate" rate is charged and less than the "base bill" if the "Objective" rate is charged, the customer pays the "base bill."

TABLE 4.—Changes in Retail Prices of Electricity Between Mar. 15 and June 15, 1938—
Monthly Bill, Price per Kilowatt-Hour, and Percentage Change

City and date	Type of ownership ¹	Net monthly bill				Net monthly price per kilowatt-hour			
		25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours	25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours
		Lighting and small appliances	Lighting and small appliances	Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range	Lighting and small appliances	Lighting and small appliances	Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range
New England:									
Bridgeport:									
Mar. 15, 1938.....	P	\$1.31	\$2.05	\$4.87	\$8.70	Cents 5.3	Cents 5.1	Cents 4.9	Cents 3.5
June 15, 1938.....	P	\$1.31	\$1.93	\$4.03	\$7.28	5.3	4.8	4.0	2.9
Percentage change ²			-5.9	-17.3	-16.4				
New Haven:									
Mar. 15, 1938.....	P	\$1.31	\$2.05	\$4.87	\$8.70	5.3	5.1	4.9	3.5
June 15, 1938.....	P	\$1.31	\$1.93	\$4.03	\$7.28	5.3	4.8	4.0	2.9
Percentage change ²			-5.9	-17.3	-16.4				
Middle Atlantic:									
New York:									
Company 1:³									
Mar. 15, 1938 ⁴	P	\$1.60	\$2.46	\$4.81	\$8.16	6.8	6.1	4.8	3.3
June 15, 1938 ⁵	P	\$1.71	\$2.49	\$4.88	\$8.29	6.8	6.2	4.9	3.3
Percentage change ²		+1.3	+1.3	+1.4	+1.6				
Company 2:⁷									
Mar. 15, 1938 ⁴	P	\$1.95	\$3.02	\$6.08	\$10.67	7.8	7.5	6.1	4.3
June 15, 1938 ⁸	P	\$1.97	\$3.05	\$6.14	\$10.77	7.9	7.6	6.1	4.3
Percentage change ²		+1.0	+1.0	+1.0	+1.0				
Company 3:⁹									
Mar. 15, 1938 ⁴	P	\$2.19	\$3.17	\$5.62	\$9.09	8.8	7.9	5.6	3.6
June 15, 1938 ⁸	P	\$1.75	\$2.52	\$5.05	\$8.14	7.0	6.3	5.0	3.3
Percentage change ²		-20.2	-20.4	-10.2	-10.5				
East North Central:									
Indianapolis:									
Mar. 15, 1938.....	P	\$1.38	\$2.10	\$4.40	\$8.15	5.5	5.3	4.4	3.3
June 15, 1938.....	P	\$1.38	\$2.10	\$4.00	\$7.10	5.5	5.3	4.0	2.8
Percentage change ²				-9.1	-12.9				
West North Central:									
Kansas City:⁴									
Mar. 15, 1938.....	P	\$1.66	\$2.35	\$4.08	\$7.91	6.6	5.9	4.1	3.2
June 15, 1938.....	P	\$1.28	\$2.04	\$3.83	\$7.65	5.1	5.1	3.8	3.1
Percentage change ²		-23.1	-13.0	-6.3	-3.2				
South Atlantic:									
Charleston, S. C.⁹									
Mar. 15, 1938.....	P	\$1.60	\$2.50	\$5.35	\$8.85	6.4	6.2	5.3	3.5
June 15, 1938.....	P	\$1.50	\$2.25	\$4.20	\$6.82	6.0	5.6	4.2	2.7
Percentage change ²		-6.3	-10.0	-21.5	-22.9				
Jacksonville:									
Mar. 15, 1938.....	M	\$1.75	\$2.70	\$4.95	\$7.95	7.0	6.8	5.0	3.2
June 15, 1938.....	M	\$1.50	\$2.35	\$4.60	\$7.60	6.0	5.9	4.6	3.0
Percentage change ²		-14.3	-13.0	-7.1	-4.4				
Mountain:									
Salt Lake City:^{4,9}									
Mar. 15, 1938.....	P	\$1.63	\$2.40	\$4.92	\$7.85	6.5	6.0	4.9	3.1
June 15, 1938.....	P	\$1.63	\$2.30	\$3.83	\$7.14	6.5	5.7	3.8	2.9
Percentage change ²			-4.3	-22.2	-9.1				
West South Central:									
Little Rock:^{4,10}									
Dec. 15, 1937:									
Present.....	P	\$1.99	\$2.88	\$5.20	\$8.67	8.0	7.2	5.2	3.1
Centennial.....	P	\$1.84	\$2.63	\$5.10	\$8.67	7.3	6.6	5.1	3.0
Mar. 15, 1938.....	P	\$1.79	\$2.55	\$5.10	\$8.67	7.1	6.4	5.1	3.0
Percentage change: ²									
Present.....		-10.3	-11.3	-2.0					
Centennial.....		-2.8	-3.1						

¹ Type of ownership is indicated as follows: P, private utility; M, municipal plant.² Net monthly bills are computed to mills for purposes of comparison.³ Serving Bronx, Brooklyn, Manhattan, and Queens.⁴ Prices include a 2-percent sales tax.⁵ Prices include a 2-percent sales tax.⁶ Prices include an adjustment for an increase in the cost of fuel.⁷ Serving Queens.⁸ Serving Richmond.⁹ The "Objective rate plan" has been discontinued. The "Objective" rate effective at the time of the change has been retained and was made available to all customers. The rate shown for March 15 was the "Immediate" or "Present" rate under which from 35 to 40 percent of the customers were billed.¹⁰ The "Objective rate plan" has been discontinued and has been supplanted by a single new rate schedule.

GAS PRICES IN JUNE 1938

RESIDENTIAL rates for gas are secured quarterly from 50 cities. These rates are used in computing average prices and typical bills for each city for quantities of gas which approximate the average residential consumption requirements for each of four combinations of services.

The December report shows prices effective for that month in each city together with a record of all changes which occurred during the preceding 12 months. Reports for March, June, and September show only the changes which occurred during the preceding quarter.

In order to put the rate quotations upon a comparable basis it is necessary to convert the normal consumption requirements used for computing monthly bills into an equivalent heating value expressed in therms (1 therm=100,000 B. t. u.). This procedure is necessary because of the wide range in the heating value of a cubic foot of gas between different cities. The equipment and blocks of consumption which have been selected as representative of average conditions throughout the country are based upon the requirements of a five-room house, including living room, dining room, kitchen, and two bedrooms.

These specifications are:

	Therms
Range.....	10. 6
Range and manual-type water heater.....	19. 6
Range and automatic-storage or instantaneous type water water heater.....	30. 6
Range, automatic-storage or instantaneous type water heater, and refrigerator.....	40. 6

Price Changes Between March and June 1938

Reductions in residential gas rates were reported for two cities, New York and San Francisco. In New York City, which serves manufactured gas of a heating value of approximately 540 British thermal units per cubic foot, one company operating in Bronx, Manhattan, and Queens inaugurated their summer rates for the second consecutive season. The length of the season was increased 2 months to be effective for May through October 1938. Substantial reductions, which were available for the use of more than 3,000 cubic feet of gas per month, were as follows for the indicated services and blocks of consumption:

Service	Consumption		Net bill June 1938	Percentage decrease since March 1938
	Therms	Cubic feet		
Range and manual-type water heater.....	19. 6	3, 630	\$4. 04	5. 1
Range and automatic water heater.....	30. 6	5, 670	5. 62	15. 5
Range, automatic water-heater, and refrigerator.....	40. 6	7, 520	7. 05	20. 1

The bills for New York include the advance of 1 percent in the city sales tax which is paid by customers in each of the five boroughs. The tax was increased from 2 percent to 3 percent.

San Francisco, which serves natural gas of about 1,150 British thermal units heating value, reported a new rate schedule beginning April 1, 1938, which resulted in the following reductions:

Service	Consumption		Net bill June 1938	Percentage decrease since March 1938
	Therms	Cubic feet		
Range.....	10.6	920	\$1.22	4.4
Range and manual-type water heater.....	19.6	1,700	1.73	5.2
Range and automatic water heater.....	30.6	2,660	2.35	5.7
Range, automatic water heater, and refrigerator.....	40.6	3,530	2.85	8.1

Wholesale Prices

WHOLESALE PRICES IN JUNE 1938

THE index number of wholesale commodity prices of the Bureau of Labor Statistics advanced 0.3 percent during June. This was in contrast to the downward movement of the preceding 10 months. From July 1937 to May 1938, the general index declined steadily from 87.9 to 78.1 percent of the 1926 average, the lowest level of the past 3½ years. The accumulated decline of the 10-month downward swing in prices was 11.1 percent. The level for June was 10.9 percent below the previous high.

Of the 10 major commodity groups, three—farm products, foods, and fuel and lighting materials—increased from May to June. The remaining seven groups registered declines ranging from 0.1 percent for housefurnishing goods to 1.3 percent for hides and leather products. Textile products declined 0.9 percent; building materials, 0.8 percent; chemicals and drugs, 0.7 percent; metals and metal products, 0.6 percent; and the miscellaneous commodities group, 0.3 percent.

Compared with June 1937, the indexes for all groups except metals and metal products showed declines. During the year period, farm products decreased 22.4 percent; textile products, 16.2 percent; hides and leather products, 15.3 percent; foods, 13.7 percent; chemicals and drugs, 8.7 percent; miscellaneous commodities, 8.2 percent; building materials, 7.4 percent; housefurnishing goods, 2.7 percent; and fuel and lighting materials, 1.4 percent. Metals and metal products for June 1938 were 0.2 percent higher than they were for June 1937.

Higher prices in June for agricultural commodities were primarily responsible for the 1.0 percent increase in the index of the raw materials group. In contrast, semimanufactured commodities prices declined 1.7 percent during the month. Wholesale price changes of finished or processed commodities were less marked than prices of raw materials and partially processed items. The index for the group of manufactured commodities advanced 0.1 percent. Compared with June 1937, the raw materials group index was 17.1 percent lower, semimanufactured articles averaged 14.6 percent less, and finished products prices were down by 6.3 percent.

According to the index for "All commodities other than farm products," wholesale prices of nonagricultural commodities remained

unchanged during June. The index for the group was 7.5 percent below a year ago. Prices of industrial materials, as measured by the index for "All commodities other than farm products and foods," dropped 0.4 percent during the month and were 5.6 percent cheaper than they were in June 1937.

A comparison of the June level of wholesale prices with May 1938 and June 1937 is shown in table 1.

TABLE 1.—Comparison of Index Numbers of Wholesale Prices for June 1938 With May 1938 and June 1937

[1926=100]

Commodity group	June 1938	May 1938	Change from a month ago	June 1937	Change from a year ago
			Percent		Percent
All commodities.....	78.3	78.1	+0.3	87.2	-10.2
Farm products.....	68.7	67.5	+1.8	88.5	-22.4
Foods.....	73.1	72.1	+1.4	84.7	-13.7
Hides and leather products.....	90.1	91.3	-1.3	106.4	-15.3
Textile products.....	65.5	66.1	-.9	78.2	-16.2
Fuel and lighting materials.....	76.4	76.2	+.3	77.5	-1.4
Metals and metal products.....	96.1	96.7	-.6	95.9	+.2
Building materials.....	89.7	90.4	-.8	96.9	-7.4
Chemicals and drugs.....	76.3	76.8	-.7	83.6	-8.7
Housefurnishing goods.....	87.1	87.2	-.1	89.5	-2.7
Miscellaneous.....	72.9	73.1	-.3	79.4	-8.2
Raw materials.....	71.4	70.7	+1.0	86.1	-17.1
Semimanufactured articles.....	74.1	75.4	-1.7	86.8	-14.6
Finished products.....	82.2	82.1	+.1	87.7	-6.3
All commodities other than farm products.....	80.3	80.3	0.0	86.8	-7.5
All commodities other than farm products and foods.....	81.3	81.6	-.4	86.1	-5.6

The number of changes within each group which influenced the movement of the all-commodity index in June is shown in table 2.

TABLE 2.—Number of Items Changing in Price From May to June 1938

Commodity group	Increases	Decreases	No change
All commodities.....	114	243	456
Farm products.....	31	30	6
Foods.....	29	58	35
Hides and leather products.....	4	12	25
Textile products.....	5	43	66
Fuel and lighting materials.....	11	6	7
Metals and metal products.....	8	33	105
Building materials.....	8	21	57
Chemicals and drugs.....	4	13	72
Housefurnishing goods.....	3	5	53
Miscellaneous.....	11	22	30

The farm products group, with a rise of 1.8 percent, registered the greatest advance during the month. The index for June was 68.7 percent of the 1926 average. With the exception of the index for textile products, farm products prices on the average are lower than for any of the other major group classifications of commodities. Whole-

sale prices for livestock and poultry averaged 3.0 percent higher in June than in May. Grains advanced 0.6 percent, and the subgroup of "Other farm products" rose 1.3 percent. Important farm product items which averaged higher in prices were wheat, steers, hogs, sheep, fresh apples, oranges, peanuts, onions, and white and sweet potatoes. Quotations were lower for barley, rye, calves, hay, hops, seeds, and wool. Market prices of farm products have continued steadily downward since July 1937, when the index was 89.3. The accumulated decline to June was 23.1 percent. The week to week movement of farm products during June was generally upward.

Advances of 5.1 percent for fruits and vegetables, 2.9 percent for meats, and 2.3 percent for cereal products caused the foods group index to rise 1.4 percent and register the first monthly advance since September 1937. The June index, 73.1, was 13.7 percent below June 1937 and 16.9 percent below September 1937, the high point for that year. Among the food items which averaged higher in price were flour, rice, fresh beef, lamb, fresh pork, cocoa beans, and edible tallow. Price declines were reported for butter, powdered milk, canned cherries and pineapple, dried raisins, bananas, dressed poultry, copra, granulated sugar, and canned tomatoes.

Since August 1937, the movement for hides and leather products has been steadily downward. From a high of 108.1 in that month, the index for the group declined to 90.1. The decrease during June was 1.3 percent to a level 15.3 percent below a year ago. Lower average prices were reported for all subgroups. Shoes registered an average decline of 0.7 percent; hides and skins, 1.7 percent; and leather, 0.6 percent. Other leather products including gloves and luggage declined 4.6 percent.

After advancing during the first 4 months of 1937, the index for the textile products group has shown an uninterrupted decline since April last year except for a fractional advance in July. The accumulated decrease from an index of 79.5 to 65.5 for June has been 17.6 percent. With the exception of clothing, all subgroups shared in the decline. Important textile items which registered price decreases were osnaburg, print cloth, tire fabrics, toweling, rayon, worsted yarns, raw jute, and raw silk. During the 12-month period from June 1937 to June this year, the decrease was 16.2 percent.

Principally because of higher prices for gasoline, the index for fuel and lighting materials advanced 0.3 percent. Anthracite prices were 0.9 percent higher in June than in May. Other items in the group showed no marked price changes. Fluctuations during the past 18 months have been narrow, and the index for June was 1.4 percent below a year ago.

Since the previously announced price changes in steel, the metals and metal products index has remained fairly steady, and the decline

during June was the first noticeable change. The average for the month was 0.6 percent lower than in May. Lower steel prices were primarily responsible for the group decline. Average prices for nonferrous metals were also lower.

Plumbing and heating fixtures showed no change from May. Lower prices were reported for butts, pig iron, scrap steel, steel strips, structural steel, antimony, ingot copper, pig lead, copper wire and rods, and lead pipe.

With the exception of a slight rise in March 1938, wholesale prices of building materials have been downward since May 1937. Although price changes have not been radical, the index has dropped from 97.2 to 89.7, or a decrease of 7.7 percent. During June average lumber prices dropped 0.7 percent; paint and paint materials, 1.0 percent; and structural steel, 1.7 percent. Wholesale prices for brick and tile were fractionally higher, and for plumbing and heating fixtures were unchanged.

TABLE 3.—Index Numbers of Wholesale Prices, by Groups and Subgroups of Commodities
[1926=100]

Group and subgroup	June 1938	May 1938	June 1937	Group and subgroup	June 1938	May 1938	June 1937
All commodities	78.3	78.1	87.2	Building materials	89.7	90.4	96.9
Farm products	68.7	67.5	88.5	Brick and tile.....	90.6	90.5	95.0
Grains.....	62.7	62.3	105.7	Cement.....	95.5	95.5	95.5
Livestock and poultry.....	80.2	77.9	98.3	Lumber.....	88.7	89.3	102.2
Other farm products.....	63.0	62.2	77.4	Paint and paint materials.....	80.1	80.9	83.6
Foods	73.1	72.1	84.7	Plumbing and heating.....	77.2	77.2	78.7
Dairy products.....	68.5	69.1	72.0	Structural steel.....	113.0	114.9	114.9
Cereal products.....	80.2	78.4	90.4	Other building materials.....	93.3	94.1	101.1
Fruits and vegetables.....	61.7	58.7	84.5	Chemicals and drugs	76.3	76.8	83.4
Meats.....	84.5	82.1	98.0	Chemicals.....	80.6	81.2	90.1
Other foods.....	64.7	65.4	74.3	Drugs and pharmaceuticals.....	71.9	72.8	78.0
Hides and leather products	90.1	91.3	106.4	Fertilizer materials.....	69.5	69.6	70.5
Shoes.....	101.8	102.5	107.5	Mixed fertilizers.....	69.3	69.3	72.3
Hides and skins.....	62.3	63.4	114.6	Housefurnishing goods	87.1	87.2	89.5
Leather.....	81.6	82.1	98.8	Furnishings.....	90.7	90.8	92.5
Other leather products.....	97.7	102.4	102.3	Furniture.....	83.5	83.6	86.6
Textile products	65.5	66.1	78.2	Miscellaneous	72.9	73.1	79.4
Clothing.....	82.2	82.2	89.1	Automobile tires and tubes.....	57.4	57.4	58.4
Cotton goods.....	63.9	65.0	89.7	Cattle feed.....	78.4	78.6	116.9
Hosiery and underwear.....	59.7	60.5	64.6	Paper and pulp.....	85.5	86.9	95.0
Silk and rayon.....	27.6	28.4	32.5	Rubber, crude.....	26.3	24.2	41.0
Woolen and worsted goods.....	75.6	76.0	93.2	Other miscellaneous.....	81.1	81.5	85.8
Other textile products.....	65.0	65.3	67.5	Raw materials	71.4	70.7	98.1
Fuel and lighting materials	76.4	76.2	77.5	Semimanufactured articles	74.1	75.4	86.8
Anthracite.....	74.5	73.8	74.5	Finished products	82.2	82.1	87.7
Bituminous coal.....	97.5	97.5	98.5	All commodities other than farm products	80.3	80.3	98.8
Coke.....	105.3	105.5	105.0	All commodities other than farm products and foods	81.3	81.6	86.1
Electricity.....	(1)	(1)	79.5				
Gas.....	(1)	88.3	84.2				
Petroleum products.....	56.3	56.4	61.5				
Metals and metal products	96.1	96.7	95.9				
Agricultural implements.....	96.1	96.3	94.1				
Farm machinery.....	97.6	97.8	96.1				
Iron and steel.....	100.9	101.8	99.7				
Motor vehicles ¹	96.0	95.8	86.9				
Nonferrous metals.....	67.2	68.8	91.9				
Plumbing and heating.....	77.2	77.2	78.7				

¹ Data not available.

² Preliminary revision.

The index for the chemicals and drugs group declined 0.7 percent. Responsible for the decrease were lower prices for alumina sulphate, copper sulphate, toluene, citric acid, glycerine, and palm niger oil. Average prices for mixed fertilizers were unchanged for June and fertilizer materials dropped 0.1 percent. The subgroup of chemicals averaged 0.7 percent lower and drugs and pharmaceuticals, 1.2 percent below the May level.

Furniture and furnishings contributed to the fractional decline in the index for housefurnishing goods. Price changes were minor and the group level was only 2.7 percent below the average for June 1937.

Average wholesale prices of cattle feed declined 0.3 percent during the month. Paper and pulp dropped 1.6 percent and soap prices fell 1.8 percent. Crude rubber prices, on the other hand, rose 8.7 percent, and automobile tires and tubes did not change in price during the month. Cylinder oil averaged lower, as did also wood pulp and box-board.

Index numbers for the groups and subgroups of commodities for May and June 1938 and June 1937 are shown in table 3.

Index Numbers by Commodity Groups, 1926 to June 1938

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1937, inclusive, and by months from June 1937 to June 1938, inclusive, are shown in table 4.

TABLE 4.—*Index Numbers of Wholesale Prices, by Groups of Commodities*

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
By years:											
1926.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1929.....	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.2	94.3	82.6	95.3
1932.....	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.5	75.1	64.4	64.8
1933.....	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.6	75.8	62.5	65.9
1936.....	80.9	82.1	95.4	71.5	76.2	87.0	86.7	80.4	81.7	70.5	80.8
1937.....	86.4	85.5	104.6	76.3	77.6	95.7	95.2	83.9	89.7	77.8	86.3
By months:											
1937:											
June.....	88.5	84.7	106.4	78.2	77.5	95.9	96.9	83.6	89.5	79.4	87.2
July.....	89.3	86.2	106.7	78.3	78.1	96.1	96.7	83.9	89.7	79.0	87.9
August.....	86.4	86.7	108.1	77.1	78.4	97.0	96.3	82.2	91.1	77.3	87.5
September.....	85.9	88.0	107.6	75.3	78.7	97.1	96.2	81.4	91.1	77.0	87.4
October.....	80.4	85.5	106.7	73.5	78.5	96.4	95.4	81.2	91.0	76.2	85.4
November.....	75.7	83.1	101.4	71.2	78.2	96.8	93.7	80.2	90.4	75.4	83.3
December.....	72.8	79.8	97.7	70.1	78.4	96.3	92.5	79.5	89.7	75.0	81.7
1938:											
January.....	71.6	76.3	96.7	69.7	78.3	96.6	91.8	79.6	88.3	75.2	80.9
February.....	69.8	73.5	94.7	68.6	78.5	96.0	91.1	79.1	88.0	74.8	79.8
March.....	70.3	73.5	93.6	68.2	77.7	96.0	91.5	78.7	87.7	74.4	79.7
April.....	68.4	72.3	92.1	67.2	76.8	96.3	91.2	77.5	87.3	73.4	78.7
May.....	67.5	72.1	91.3	66.1	76.2	96.7	90.4	76.8	87.2	73.1	78.1
June.....	68.7	73.1	90.1	65.5	76.4	96.1	89.7	76.3	87.1	72.9	78.3

The price trend for specified years and months since 1926 is shown in table 5 for the following groups of commodities: Raw materials, semimanufactured articles, finished products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Finished products" was given in the December 1937 issue of the Wholesale Price pamphlet.

TABLE 5.—Index Numbers of Wholesale Prices, by Special Groups of Commodities

[1926=100]

Year and month	Raw materials	Semi-manufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods	Year and month	Raw materials	Semi-manufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods
1926.....	100.0	100.0	100.0	100.0	100.0	1937—Continued.					
1929.....	97.5	93.9	94.5	93.3	91.6	October.....	80.7	82.5	88.1	86.4	85.1
1932.....	55.1	59.3	70.3	68.3	70.2	November.....	77.2	79.8	86.7	84.8	84.3
1933.....	56.5	65.4	70.5	69.0	71.2	December.....	75.4	77.7	85.3	83.5	83.6
1936.....	79.9	75.9	82.0	80.7	79.6	1938:					
1937.....	84.8	85.3	87.2	86.2	85.3	January.....	74.9	76.9	84.3	82.8	83.5
1937:						February.....	73.6	76.1	83.3	81.9	83.0
June.....	86.1	86.8	87.7	86.8	86.1	March.....	73.2	75.6	83.4	81.6	82.6
July.....	86.5	87.0	88.8	87.5	86.3	April.....	71.3	75.3	82.7	80.8	82.0
August.....	84.8	86.6	89.0	87.6	86.1	May.....	70.7	75.4	82.1	80.3	81.6
September.....	84.4	85.3	89.1	87.6	85.9	June.....	71.4	74.1	82.2	80.3	81.3

Weekly Fluctuations

Weekly variations in the major group classifications during May and June are shown by the index numbers in table 6.

TABLE 6.—Weekly Index Numbers of Wholesale Prices, by Commodity Groups, May and June 1938

[1926=100]

Commodity group	June 25, 1938	June 18, 1938	June 11, 1938	June 4, 1938	May 28, 1938	May 21, 1938	May 14, 1938	May 7, 1938
All commodities.....	78.2	78.4	77.8	77.7	78.1	78.2	77.8	77.9
Farm products.....	68.8	69.7	68.3	67.2	68.8	68.8	67.4	67.4
Foods.....	73.2	73.5	72.7	72.3	73.0	72.9	71.5	71.4
Hides and leather products.....	91.0	91.1	91.1	91.5	91.6	91.7	92.3	92.2
Textile products.....	64.9	64.8	64.9	65.5	65.8	66.0	66.1	66.1
Fuel and lighting materials.....	76.8	76.7	76.5	76.5	76.5	76.6	76.8	77.1
Metals and metal products.....	96.4	96.5	95.7	95.7	95.7	96.3	96.3	96.3
Building materials.....	90.0	89.8	90.1	90.2	90.9	90.4	90.9	90.9
Chemicals and drugs.....	76.1	75.8	75.9	75.9	76.0	76.4	76.7	77.0
Housefurnishing goods.....	88.4	88.6	88.6	88.6	88.6	88.6	88.6	88.6
Miscellaneous.....	72.8	72.7	72.4	72.5	72.7	73.1	73.1	73.0
Raw materials.....	71.3	71.6	70.9	70.2	71.2	71.2	70.4	70.7
Semimanufactured articles.....	74.3	74.1	72.8	73.0	73.3	74.6	74.8	74.9
Finished products.....	82.5	82.6	82.2	82.3	82.5	82.5	82.2	82.4
All commodities other than farm products.....	80.3	80.3	79.9	80.0	80.2	80.4	80.2	80.2
All commodities other than farm products and foods.....	81.5	81.5	81.2	81.4	81.5	81.7	81.9	82.0

Wholesale Prices and Index Numbers of Individual Commodities January to June 1938

Since July 1935 the table showing prices and index numbers of individual commodities included in the composite index has been issued in mimeographed form and is available upon request. As a permanent record the prices and index numbers of individual commodities together with the code numbers are published semiannually in the June and December issues of "Wholesale Prices."

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Recent Publications of Labor Interest

JULY 1938

Aircraft Industry

Survey of the aircraft industry. (In Research Bulletin, International Union United Automobile Workers, Detroit, Mich., May 1938, pp. 7-13; chart.)

The article includes information on wages and hours, employment, hiring policies, and production.

Civil Service

Women in the Federal service. Washington, U. S. Civil Service Commission, 1938. 52 pp.

Contains a history of women in the Federal service and discussion of the employment of married women, present status of women in the service, and training opportunities for Federal employment. A bibliography is appended.

Public service in Great Britain. By Hiram Miller Stout. Chapel Hill, University of North Carolina Press, 1938. xx, 189 pp.

Review of the history, and an appraisal of the value at the present time, of the British civil-service organization.

Civilian Conservation Corps

Selecting 1,800,000 young men for the C. C. C. By W. Frank Persons. Washington, U. S. Bureau of Labor Statistics, 1938. 6 pp. (Serial No. R. 745, reprint from April 1938 Monthly Labor Review.)

Construction Activity

Statistics of building construction, 1920 to 1937, as shown by building permits issued: Part III, Building construction, 1936 and 1937. Washington, U. S. Bureau of Labor Statistics, 1938. 86 pp. (Bulletin No. 650.)

Consumer Problems

Consumer protection—how it can be secured. By Roger Babson and C. N. Stone. New York, Harper & Bros., 1938. 207 pp.; bibliography.

Warns the consumer of various ways in which he is likely to be victimized, and offers suggestions as to what he can do about it. Among the measures suggested are that consumers join consumers' cooperative associations and consumers' leagues and work for consumer representation in Government agencies.

The consumer speaks on bituminous coal prices. Excerpts from statements made at first Consumer Conference, December 9-10, 1937, Washington, D. C. Washington, U. S. National Bituminous Coal Commission, Consumers' Counsel, 1938. 61 pp. (Consumer Ideas, No. 2.)

Cooperative Movement

Consumer cooperatives, retail and wholesale. (In The Commonwealth, Commonwealth Club of California, San Francisco, Part 2, May 24, 1938; 54 pp.; bibliography.)

Symposium on the subject of consumers' cooperatives, with participants representing the points of view of the businessman, lawyer, economist, etc.

Course of study on consumers' cooperation. St. Paul, Minnesota Department of Education, 1938. 91 pp.

Consumers' cooperation in Great Britain: An examination of the British cooperative movement. By A. M. Carr-Saunders, P. Sargant Florence, and Robert Peers. London, George Allen & Unwin, Ltd., 1938. 556 pp., maps.

This detailed study covers many points of interest hitherto almost entirely neglected—administration of both retail and wholesale societies, general questions of democratic control, the place of federal associations in the cooperative structure, working conditions in cooperatives, points of efficiency and of inefficiency of the cooperative movement, and its future possibilities.

Report of proceedings of the fifteenth congress of International Cooperative Alliance, Paris, September 6-9, 1937. London, International Cooperative Alliance, 1938. 344 pp.

Contains much information about conditions encountered by the cooperative movement in various countries of Europe, the report of the committee investigating the "present application of the Rochdale principles of cooperation," the "place of cooperation in different economic systems," and other matters that came up for consideration by the Congress.

Report of Irish Agricultural Organization Society, Ltd., for year ending March 31-1937. Dublin, 1938. 67 pp.

Gives data for 1936-37 on the various types of agricultural cooperative associations in Ireland.

Modèles de statuts à l'usage des associations agricoles suisses. Brugg, Switzerland, Secrétariat des Paysans suisses, 1937. 185 pp., map. 2d ed. (Publication No. 118.)

Instructions in proper methods of organizing agricultural cooperative associations, with model bylaws for various types of associations.

Cuna emerges: A third credit-union book. By Roy F. Bergengren. Madison, Wis., Credit Union National Association, 1938. 233 pp., illus. (3d ed.)

Contains a short history of cooperative credit, with particular reference to the United States, describes the credit-union operation and functions, organization procedure, duties of officers, legal status under State and Federal laws (with a chart showing the principal provisions of the various laws), etc. Appendixes give the text of the Federal credit-union law, typical forms used by credit unions, and a directory of the State leagues and their managing directors.

Economic and Social Problems

Labor problems in American industry. By Carroll R. Daugherty. Boston Houghton Mifflin Co., 1938. Various paging, maps.

Revised edition of a book which was first published in 1933. Part I portrays the psychological, social, economic, historical, and political factors significant to an understanding of industrial relations; Part II deals with insecurity of workers, wages, hours, industrial conflict, and conditions affecting workers whom the author classifies as sub-standard, namely, women, children, Negroes, casual-migratory, and convicts; Part III describes structure and functioning of labor unions, employers' activities in connection with scientific and personnel management, and governmental attempts to mitigate some of the labor problems.

Labor problems from both sides. By Malcolm Keir. New York, Ronald Press Co., 1938. 381 pp.

The chapter headings are questions, such as "Can unemployment be abolished?" and "Do company unions serve labor's interests?" Affirmative and negative arguments are given in answer to each question and at the ends of the chapters there are further questions and lists of references.

Political economy and capitalism: Some essays in economic tradition. By Maurice Dobb. London, George Routledge & Sons, Ltd., 1937. 360 pp.

Reinterpretation of economic thought and especially of the theory of value in relation to economic crises, imperialism, and socialized investment.

Project for a national advisory economic council. By Bryant Putney. Washington, Editorial Research Reports, 1013 Thirteenth Street NW., 1938. 14 pp. (Vol. I, 1938, No. 5.)

A discussion of the President's plan for a national economic council and of other proposals for such a council in the United States, with outlines of the systems in effect in foreign countries.

Education and Guidance

Adult education. By Maris M. Proffitt. Washington, U. S. Office of Education, 1938. 73 pp. (Bulletin, 1937, No. 2; Chapter IV of Volume I of Biennial survey of education in United States, 1934-36.)

Reviews developments, summarizes trends, and indicates a developing philosophy behind the determination of adult educational objectives and programs.

Occupational guidance: Georgia program for improvement of instruction in the public schools. Atlanta, State Department of Education, 1938. 54 pp., bibliography.

Directory of opportunities for vocational training in New York City. New York, Vocational Service for Juniors, 1938. 98 pp.

The directory is confined to courses offering training for definite types of work, hence does not include courses of general cultural character or those providing training for avocations rather than vocations.

The General Confederation of Labor and workers' education in France. By E. and G. Lefranc. (In International Labor Review, Geneva, May 1938, pp. 618-643.)

Describes the activities in the field of workers' education of the principal labor organization in France.

Employment and Unemployment

The juvenile labor market. By John and Sylvia Jewkes. London, Victor Gollancz, Ltd., 1938. 175 pp., charts.

Results of a study of employment in the Lancashire district of England are discussed and a future national policy is outlined.

Third annual report of London Regional Advisory Council for Juvenile Employment, 1937. London, 1938. 11 pp.

Survey of juvenile employment conditions during 1937 and of facilities for improving the position of young seekers for work.

Employment Service

Thirty years of personnel and placement work at the Carnegie Institute of Technology. By John D. Beatty. Pittsburgh, Carnegie Institute of Technology, 1938. 63 pp.

The bulletin contains some recent salary data and also a discussion of the problems of college bureaus in connection with employment after graduation and employment service for alumni.

Forestry Industry

Skogsbygdens arbets- och levnadsvillkor: Del I, Utredningens huvudresultat. Stockholm, Socialstyrelsen, 1938. 631 pp., maps, charts, illus.

Results of an investigation of labor conditions in the forestry industry in Sweden, including data on occupations, number of workers employed, unemployment, wages, standard of living, labor legislation, and various Government measures for the improvement of labor conditions. In Swedish, with French translation of table of contents.

Handicrafts

Handicraft and unemployment. By Ernst Harms. (In Jewish Social Service Quarterly, New York, June 1938, pp. 355-364.)

Analyzes the possibilities of handicraft from vocational and economic viewpoints and also as a means to improve social conditions and the cultural situation.

Handicrafts in the southern highlands—a selected bibliography. Compiled by Allen H. Eaton. New York, Russell Sage Foundation, October 1937. 6 pp. (Bulletin No. 145.)

Health and Industrial Hygiene

Carbon-monoxide poisoning in industry and its prevention. By May R. Mayers, M. D. Albany, N. Y., Department of Labor, 1938. 66 pp., illus. (Special Bulletin No. 194.)

Guide to the prevention of carbon-monoxide poisoning in industry.

Silicosis in the foundry industry. By Leonard Greenburg, M. D., William Siegal, M. D., and Adelaide Ross Smith, M. D. Albany, N. Y., Department of Labor, 1938. 48 pp., map, charts. (Special Bulletin No. 197.)

The survey, which covered every foundry in the State, included X-ray examinations of most of the workers in 80 of the 311 foundries covered. From the findings it appeared that the silicosis hazard in the foundry industry in New York State, while existent, is of a mild degree of severity and may be expected to yield satisfactorily to appropriate measures of control.

First aid in industry. By Leonard J. Goldwater, M. D. Albany, N. Y., Department of Labor, 1938. 37 pp., illus. (Special Bulletin No. 193.)

Legal requirements as to first-aid provisions in New York for the different industries are presented, with practical suggestions as to treatment for a variety of injuries.

An introduction to the study of noise problems. By H. Davies. London, Draftsman Publishing Co., Ltd., [1938?]. 49 pp., charts, bibliography.

The first part of this study deals with the propagation of sound, characteristics of the ear, sound analysis, noise meters, and scales of loudness; the second part with noise problems and various methods for the reduction of noise.

The assessment of psychological qualities by verbal methods: A survey of attitude tests, rating scales and personality questionnaires. By P. E. Vernon. London, Industrial Health Research Board, 1938. 124 pp. (Report No. 83.)

A study of 132 families in California cotton camps with reference to availability of medical care. By Bertha S. Underhill. San Francisco, State Department of Social Welfare, [1938?]. 31 pp., illus.; mimeographed.

These families, living the entire year under labor-camp conditions, were found to be unable, because of irregularity of employment and low earnings, to secure needed medical care.

Housing

Urban housing conditions in United States. By Rollo H. Britten. (In Labor Information Bulletin, U. S. Bureau of Labor Statistics, Washington, June 1938, pp. 1-3; illus.)

Report of New York State Board of Housing. Albany, 1938. 57 pp., pasters. (Legislative Document, 1938, No. 66.)

Reviews the national public-housing program and activities of the various State and municipal housing authorities in New York, and gives financial statements of projects under State housing law.

Ninth annual report of the Department of Health for Scotland, 1937. Edinburgh, 1938. 220 pp. (Cmd. 5713.)

The section on housing shows the progress made in building, the existing need of low-cost housing, and the effect of labor shortage on the program during 1937.

Industrial Accidents and Workmen's Compensation

Tenth annual report of Missouri Workmen's Compensation Commission, for statistical year of 1936 and operating year of 1937. Jefferson City, 1938. 20 pp.

Reports were received during the calendar year 1937 of 73,741 injuries, an increase of 5 percent over the 70,243 reported for 1936. In 1936 compensation costs for 75,335 accident cases amounted to \$1,630,200, and medical costs to \$926,762, while compensation costs for 71 occupational-disease cases amounted to \$26,519 and medical costs to \$2,730, a total of \$2,586,211.

Statistics of compensation and proceedings under Workmen's Compensation Acts and Employers' Liability Act, 1880, in Great Britain during the year 1936. London, Home Office, 1938. 32 pp. (Cmd. 5722.)

Report by departmental committee on certain questions arising under workmen's compensation acts [Great Britain]. London, Home Office, 1938. 115 pp. (Cmd. 5657.)

The subjects discussed are miner's nystagmus, medical examination of injured workers, and lump-sum settlements.

Compte rendu de l'Institut National d'Assurances Sociales pour 1935 sur l'activité de la prévention des accidents; statistique des accidents déclarés en 1935. Budapest, 1937. 75 pp., illus.

Account of accident-prevention work in Hungary and statistics of accidents reported in 1935. In Hungarian, with French and German synopses and translations of titles and table heads.

The safe use of explosives in coal mines. London, Safety in Mines Research Board, 1938. 61 pp., illus. (What every mining man should know, No. 4—1938 revision.)

Illustrated description of the daily work of a shotfirer in a gassy or dusty mine, with explanations of reasons for safety precautions.

Bibliography on highway safety. Compiled by Mildred A. Wilson. Washington, U. S. Department of Agriculture, 1938. 136 pp. (Miscellaneous Publication No. 296.)

Industrial Disputes

Strikes in the United States, 1880-1936. By Florence Peterson. Washington, U. S. Bureau of Labor Statistics, 1938. 183 pp., charts. (Bulletin No. 651.)

Industrial Relations

Collective bargaining in automobile industry. By William L. Munger. (In Labor Information Bulletin, U. S. Bureau of Labor Statistics, Washington, June 1938, pp. 5-8; illus.)

The National Railroad Adjustment Board. By William H. Spencer. Chicago, University of Chicago Press, 1938. 65 pp. (Studies in Business Administration, Vol. VIII, No. 3.)

Results of representation cases held by New York State Labor Relations Board, July 1937-May 1, 1938. By Louis Goldberg. New York, Workers' Education Project of W. P. A., 305 Broadway, 1938. 18 pp.; mimeographed.

Right and wrong in labor relations. By William M. Leiserson. Berkeley, University of California Press, 1938. 86 pp.

Der Arbeitslohn in China. By Paul Arndt, Djini Shen, and Chü-Fen Lo. Leipzig, Hans Buske, 1937. 352 pp.

Historical review of industrial relations in China, including data on wages and hours.

Labor Legislation and Court Decisions

Labor laws and their administration, 1937: Proceedings of twenty-third convention of International Association of Governmental Labor Officials, Toronto, Canada, September 1937. Washington, U. S. Bureau of Labor Statistics, 1938. 241 pp. (Bulletin No. 653.)

Le Danemark, 1938. Copenhagen, Ministère Royal des Affaires Étrangères et le Département des Statistiques, 1938. 358 pp., maps, illus. (In French.)

A section covering social legislation includes legal provisions for protection of labor and for regulation of relations between workers and employers.

Droit Social: Textes et documents annotés concernant les rapports professionnels et l'organisation de la production. Vol. 1, No. 1. Paris, Librairie Technique et Économique, janvier 1938. 48 pp.

This new French periodical will publish the texts of laws, decrees, and regulations relative to industrial relations and the organization of production, together with legal decisions affecting these questions. The laws are annotated.

Court decisions on teacher tenure reported in 1937. Washington, National Education Association, Committee on Tenure, 1938. 35 pp.

Labor Organization and Activities

The Labor Party in transition, 1931-1938. By Dean E. McHenry. London, George Routledge & Sons, Ltd., 1938. 320 pp.

Shows the rise of the British Labor Party, its organization, policies, and activities.

The post-war history of the British working class. By Allen Hutt. New York, Coward-McCann, Inc., 1938. 274 pp., illus.

The interplay of labor and political forces is traced, important strikes are described, and particular attention is given to the significance of the general strike in 1926.

Migration

Types of migratory farm laborers and their movement into the Yakima Valley, Washington. By Richard Wakefield and Paul H. Landis. (In Rural Sociology, Baton Rouge, La., June 1938, pp. 133-144; maps.)

The transient workers in the highly seasonal agriculture of the region covered include persons from the drought States, "bindle tramps," who carry their worldly possessions in their bed rolls, migratory family workers, and casual agricultural workers. Migration routes of these transient farm workers are shown in several charts. This sample study is based on only 233 schedules, but if it is estimated that a minimum of 25,000 transient workers come to the Yakima Valley every year, some of these routes, the authors hold, are undoubtedly followed annually by a substantial number of the migrants.

Current bibliography on transiency. New York, Committee on Care of Transient and Homeless, June 6, 1938. 5 pp.; mimeographed. (No. 3.)

Millinery Industry

The economic condition of the millinery manufacturing industry in the New York metropolitan area, 1935-1936. By Paul F. Brissenden and Joseph Lipshie. New York, Millinery Stabilization Commission, Inc., 1450 Broadway, 1937. 74 pp., charts; mimeographed.

Data on annual earnings taken from this report are given in this issue of the Monthly Labor Review.

Report of Millinery Stabilization Commission, Inc., February 1, 1936, to July 30, 1937. New York, 1937. 38 pp., charts.

Describes the need which led to the establishment of the commission and its work. Information is also given on the importance of the industry in the New York market and on labor problems.

Mining Industry

Annual report of coal mines, Washington, for year ending December 31, 1937.

Olympia, Department of Labor and Industries, 1938. 22 pp., paster.

Covers accidents, employment, production, and equipment.

Annual report of West Virginia Department of Mines, 1937. Charleston, [1938]. 140 pp.

Contains a directory of coal mines and data on accidents, employment, equipment, production, and distribution. Accidents are analyzed by cause, time of occurrence, county of occurrence, and mine, and by occupation, age, nationality, length of service, and length of experience of the workers.

Annual report of Wyoming State Inspector of Coal Mines, year ending December 31, 1937. [Cheyenne?], 1938. 73 pp., illus.

The report gives detailed descriptions of fatal accidents and statistics of non-fatal accidents, employment, and production.

Statistische übersicht über die kohlenwirtschaft im jahre 1937. Berlin, Reichskohlenrat, 1938. 155 pp., charts.

Coal statistics covering the German industry and those of other countries in 1937 and earlier years. Information on mechanization, productivity, hours, and wages is included. The section on mechanization of the German industry is reviewed in this issue of the Monthly Labor Review.

Annual report on mines, Nova Scotia, 1937. Halifax, Department of Public Works and Mines, 1938. In 2 parts, 248 and 45 pp., maps, charts, illus.

Part 1 contains detailed reports on coal and other nonmetallic-mineral mines, metal mines, and quarries, with tables on employment, production and distribution, accidents, and operating conditions. Part 2 contains reports of geological explorations in connection with the location of mineral deposits.

Proceedings at annual general meeting of Chamber of Mines of Western Australia Inc. Kalgoorlie, 1938. 36 pp.

Includes the provisions of industrial awards affecting working conditions of mine employees.

Negro in Industry

The urban Negro worker in the United States, 1925-1936: An analysis of the training, types, and conditions of employment, and the earnings of 200,000 skilled and white-collar Negro workers; Volume I, Statistics by regions. Washington, U. S. Department of the Interior, Office of Adviser on Negro Affairs, 1938. 127 pp.

Occupations

New occupations for youth. By T. Otto Nall. New York, Association Press, 1938. 192 pp.

Brings together the results of a series of interviews with successful people in different occupations—inventor, air stewardess, radio librarian, office secretary, reporter, author, minister, lawyer, social worker, public-health nurse, forester, sculptor, singer, diplomat, and scientist.

Old-Age Pensions

Old-age assistance in Michigan, 1933-1937. Lansing, State Welfare Department, Bureau of Old Age Assistance, 1938. 59 pp.

Gives a short history of the old-age pension movement in Michigan through the year 1937, and a detailed statistical analysis of operations during the period November 1936 to June 1937. Data cover costs, benefits (total and average), including monthly allowances and funeral payments, and data regarding the recipient (income, living arrangements, marital status, age, nativity, etc.).

Rapport de la Commission Supérieure de la Caisse Nationale des Retraites pour la Vieillesse sur les opérations de la situation de cette caisse, année 1936. Paris, 1937. 170 pp.

Report for the year 1936 of the French national old-age retirement fund.

Planning

The future of State planning. Washington, U. S. National Resources Committee, 1938. 117 pp., maps, charts.

The progress made in the establishment of State planning agencies is shown, the membership of these bodies is given, and problems of planning are discussed.

Prison Labor

The prison labor problem in New Mexico. Washington, U. S. Prison Industries Reorganization Administration, 1938. 36 pp., mimeographed.

Results of an official survey of the existing situation, with recommendations for improving labor and living conditions.

Report of annual meeting of the National Committee on Prisons and Prison Labor, April 11, 1938. New York, National Committee on Prisons and Prison Labor, 1938. 14 pp.

A collection of statements on experience of New York State in 50 years of operation under the State-use prison-labor law.

Relief Measures and Statistics

General relief statistics for fifteen-month period January 1936 through March 1937. Washington, U. S. Works Progress Administration, 1938. 57 pp.

Households and persons receiving relief or assistance. By T. J. Woofter, Jr., and T. E. Whiting. (In *Journal of American Statistical Association*, Menasha, Wis., June 1938, pp. 363-372; charts.)

Presents estimates which the authors consider reliable enough to furnish an approximation of the trends and total volume of relief load.

Die mutterschaftshilfe in Deutschland. By Eduard Trode and E. Liebetruh. Berlin, Verlag Langewort, 1937. 212 pp.

This report on maternity aid in Germany includes information on child welfare work, special support for large families, and the taxation policy in connection with such families.

Social Security (General)

Social security—progress and prospects. Edited by Zilpha C. Franklin. New York, National Municipal League, 1937. 31 pp.

A compilation of five articles dealing, respectively, with the general subject of social security, public assistance and municipal-welfare problems, interstate problems in social security, unemployment-compensation plans, and the old-age benefits program.

Unemployment Insurance

Unemployment compensation in the United States. By Eveline M. Burns. (In *International Labor Review*, Geneva, May 1938, pp. 584-617.)

The author analyzes the provisions of the various State laws and discusses the principal problems which have arisen during the short period in which unemployment compensation laws have been in effect in this country.

Wages and Hours of Labor

Geographical variation in hours and wages during 1933 and 1935. By A. F. Hinrichs and Arthur F. Beal. Washington, U. S. Bureau of Labor Statistics, 1938. 29 pp. (Serial No. R. 735, reprint from July 1938 *Monthly Labor Review*.)

Report of proceedings under Agricultural Wages (Regulation) Act [Great Britain], 1924, for year ended September 30, 1936. London, Ministry of Agriculture and Fisheries, 1937. 59 pp.

Wages in the [British] building industry. (In *The Economist*, London, May 28, 1938, pp. 481, 482.)

Shows the method by which wages are established for building labor, including the method of applying the sliding scale based on cost of living.

Report by court of inquiry concerning wages and conditions of service of employees in the linen and cotton industry in Saorstát Éireann. Dublin, Department of Industry and Commerce, [1937?]. 37 pp.

A proposed scale of wages, by occupation, in the cotton industry, for a working week of a specified number of hours, is included in the report.

Deutsche industriearbeiterinnen-löhne, 1928-1935: Ein beitrag zum problem des gerechten lohnes. By Elisabeth Oehlandt. Rostock, Germany, Carl Hinstorffs Verlag, 1937. 108 pp. (Hamburger Wirtschafts- und Sozialwissenschaftliche Schriften, Heft 36.)

Report on wages of female workers in Germany during 1928-1935, including data on agreement wages and actual earnings, differences between the rates paid male and female workers, influence of wages upon the domestic life and the occupational opportunities of women, and working hours.

Women in Industry

Chinese women yesterday and today. By Florence Ayseough. London, Jonathan Cape, 1938. 324 pp., illus.; bibliography.

Includes some discussion of education, of developments in occupational fields, and of the Kuomintang (Nationalist Party), which is noted for its sympathy for labor.

Die gewerbliche frauenarbeit. By Artur Brandt, M. D. Dresden, Verlag des Deutschen Hygiene-Museums, G. m. b. H., 1937. 37 pp.

Deals with industrial work of women in Germany, including a review of its development and a discussion of conditions harmful to the health of women and of the number of hours they are required to work.

Kvinden i samfundet. By various authors. Copenhagen, Martins Forlag, 1937. 381 pp.

A series of articles on the present position of women in organized industrial society. The subjects discussed include the employment of women in domestic service, agriculture, industry, and commerce, and in educational, organizational, and social work, and the wages which they receive.

General Reports

The Keystone, Vol. 1, No. 1. Harrisburg, Department of Labor and Industry, March 1938. 44 pp., charts.

The Secretary of the Pennsylvania Department of Labor and Industry states that this new publication will be issued periodically to acquaint the public with the activities of the department and to present certain statistical data. This first issue discusses the functions and work of the department, the economic basis for legislation on working hours, and unemployment compensation, and gives statistics on employment, wages and hours, cost of living, and workmen's compensation.

Statistisches Jahrbuch für Österreich, 1938. Vienna, Statistisches Landesamt, 1938. Various paging.

Contains statistical information in regard to economic and social conditions in Austria, including housing, public health, prices, wages, trade agreements, industrial disputes, unemployment, employment service, and social insurance. Statistics presented cover the year 1937 or the latest year for which figures were available.

Annuaire statistique hongrois, 1936. Budapest, l'Office Central Royal Hongrois de Statistique, 1938. 422 pp. (In French.)

Includes data on employment (by industries), occupations and ages of workers, cost of living, wages, hours, industrial conflicts, unemployment, employment service, and old-age insurance.

The official year book of New South Wales, 1935-36. Sydney, Bureau of Statistics and Economics, 1938. 975 pp., map.

Material of labor interest includes statistics of pension payments, housing, employment, wages, and hours. The industrial-arbitration system, as amended by recent legislation, is described.

Social problems and policies in Sweden. (In *Annals of American Academy of Political and Social Science*, Philadelphia, May 1938, pp. 1-249; bibliography.)

Among the topics discussed in this symposium are the standard of living, the labor market and its regulation, unemployment relief, social insurance, public health, housing, cooperation, women in industry, and adult education.

Statistisches Jahrbuch der Stadt Zürich, 1937. Zürich, Statistisches Amt, 1938. 152 pp.

Statistical information in regard to economic and social conditions in the city of Zürich, Switzerland, during 1937, including housing, employment, unemployment insurance, welfare work, and old-age relief.